

EVIDENTIARY HEARING

BEFORE THE

CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

In the Matter of:)
)
Application for Certification)
of the San Joaquin Valley Energy) Center Project in Fresno County)
(SJVEC))
)

01-AFC-22

GURU ASSEMBLY HALL

8696 S. MAIN STREET

SAN JOAQUIN, CALIFORNIA

WEDNESDAY, FEBRUARY 19, 2003

11:27 a.m.

Reported by:
Valorie Phillips
Contract No. 170-01-001

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

COMMITTEE MEMBERS PRESENT

John L. Geesman, Associate Member

HEARING OFFICER, ADVISORS PRESENT

Major Williams, Jr., Hearing Officer

STAFF AND CONSULTANTS PRESENT

Paul Kramer, Legal Counsel

Mathew Trask, Siting Project Manager

Keith Golden

Mike Ringer

William Walters
Aspen Environmental Group

Alvin Greenberg
Risk Science Associates

PUBLIC ADVISER

Mathew Trask, Acting Public Adviser

APPLICANT

Jeffrey D. Harris, Attorney
Ellison, Schneider and Harris, LLP

Michael A. Argentine, Manager, Project Development
Calpine Corporation

John L. Carrier
CH2MHILL

Gary Rubenstein
Sierra Research

John Lowe

INTERVENORS

Keith Freitas

ALSO PRESENT

Cruz W. Ramos, City Manager
City of San Joaquin

Feleena Sutton
for Assemblymember Sarah Reyes

Ron Manfredi, City Manager
City of Kerman

Caroline Farrell, Attorney
California Rural Legal Assistance Foundation

Midge Godwin

Abbie Hufford

Mark Haber, Senior Advisor
United States Environmental Protection Agency
Region IX

David Warner, Manager of Permit Services
San Joaquin Valley Unified Air Pollution Control
District

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1 P R O C E E D I N G S

2 11:27 a.m.

3 ASSOCIATE MEMBER GEESMAN: I'm John
4 Geesman, a Member of the California Energy
5 Commission, and one of the two Members of the
6 Committee of the Commission responsible for the
7 conduct of this particular siting case, the San
8 Joaquin Valley Energy Center Power Plant
9 Project. Sitting to my left is the Hearing
10 Officer in the case, Major Williams.

11 I want to apologize to all of you for
12 keeping you waiting as long as you have, and thank
13 you for doing so. I needed to participate in our
14 Commission's business meeting this morning by
15 phone. And although they'd assured me it was a
16 15-minute agenda item, it managed to extend itself
17 to 90 minutes.

18 But in recognition of the patience that
19 the public has shown with our late start, I think
20 that the best thing to do would be to start
21 today's proceeding by taking public comment.
22 Probably best to simply go in the order that we've
23 received cards.

24 HEARING OFFICER WILLIAMS: Yes, yes, we
25 have. And I think they're in alphabetical order.

1 ASSOCIATE MEMBER GEESMAN: The City
2 Manager, is Ms. Ramos, here? Nice to see you
3 again.

4 MS. RAMOS: Nice seeing you again. Good
5 morning and welcome, Commissioner Geesman, Members
6 of the Commission -- I'm not sure whether they're
7 here or not -- and interested parties.

8 On behalf of the City of San Joaquin we
9 are honored to have you here today. The Council
10 has asked that I extend our thanks to you and to
11 your staff for arranging this hearing here in our
12 community.

13 For the record, the City of San Joaquin
14 City Council met at its regularly scheduled
15 meeting on February 12th and passed resolution
16 number 03-2 in support of the proposed San Joaquin
17 Valley Energy Center Power Plant Project.

18 The resolution, in parts, reads:
19 Whereas, the City of San Joaquin has carefully,
20 fully and independently evaluated the proposed
21 project and its conformance with the laws,
22 ordinances, and standards of the City, including
23 the City of San Joaquin general plan.

24 Now, therefore, the City Council of the
25 City of San Joaquin does hereby find, determine

1 and resolve as follows: The foregoing recitals
2 are true and correct. The proposed project will
3 comply with all applicable laws, ordinances, and
4 standards of the City of San Joaquin over which
5 the City has jurisdiction or would have
6 jurisdiction but for the Commission's exclusive
7 authority to certify sites and related energy
8 facilities.

9 The proposed project will be located in
10 an appropriately zoned district, and will be
11 compatible with existing and planned land uses in
12 the project vicinity.

13 The foregoing resolution was adopted
14 unanimously at the February 12th meeting.

15 In short, the City of San Joaquin
16 supports the applicant because of their proven
17 record of working diligently, thoughtfully and
18 thoroughly with other host cities.

19 Moreover, the project is being supported
20 for its benefit to the City, the surrounding
21 communities and the entire San Joaquin Valley.

22 Thank you.

23 ASSOCIATE MEMBER GEESMAN: Thank you,
24 Ms. Ramos.

25 HEARING OFFICER WILLIAMS: Thank you. I

1 saw Ms. Sutton, who came in. Would you like to
2 come forward, as well, and --

3 MS. SUTTON: You have an incredible
4 memory; very very impressed.

5 My name is Feleena Sutton and I work for
6 Assemblymember Sarah Reyes. When this project
7 started she was Chair of the Economic Development
8 Committee and we, of course, did cheers at the
9 economic development potential of having the
10 Energy Center located within the San Joaquin
11 Valley.

12 Time has progressed and now the
13 Assemblymember is Chair of Utilities and Commerce.
14 And this project still has her support.

15 So, once again, as I always have done, I
16 want to welcome you to the 31st Assembly District
17 and the beautiful City of San Joaquin. Very glad,
18 very thankful that you can be here within the City
19 to talk to the residents. And we hope you have a
20 wonderful afternoon because it looks like they're
21 feeding us quite well today. So we're looking
22 forward to that.

23 Thank you so much.

24 ASSOCIATE MEMBER GEESMAN: Thank you.

25 HEARING OFFICER WILLIAMS: Thank you.

1 Are there any other public officials here? I saw
2 some people that just walked in. Who would like
3 to take the opportunity now to speak? Sure.

4 MR. MANFREDI: Good morning and welcome
5 back to our communities. My name is Ron Manfredi;
6 I am the City Manager for the City of Kerman, and
7 a Board Member for the I-5 Business Development
8 Corridor, a Fresno County Westside economic
9 development corporation.

10 We are, of course, very pleased that
11 you're here, continuing this process. We
12 understand that there are a number of issues to
13 look at and to overcome. We are concerned that
14 the Environmental Protection Agency and the local
15 Air Quality District get together on the credits.
16 And we would hope that this would move forward.

17 We were talking -- the reason that we're
18 late this morning we were in Congressman
19 Radanovich's local office talking about this issue
20 and he promised to look into it and try to get the
21 EPA to listen to our local concerns.

22 And again, we see this as important on
23 several levels. Obviously we're concerned about
24 energy availability in the State of California and
25 our region. We're concerned about the location of

1 energy plants and the transmission of energy
2 throughout our Valley and having the availability
3 regarding the network.

4 And we're also concerned regarding our
5 growth in this area. As you know, the Central San
6 Joaquin Valley is the fastest growing region in
7 California.

8 And finally, we see this as a boon to
9 our economic development, providing the necessary
10 energy for growth in our region.

11 And once again, we appreciate your
12 presence here.

13 ASSOCIATE MEMBER GEESMAN: Thank you,
14 sir.

15 HEARING OFFICER WILLIAMS: Thank you.

16 ASSOCIATE MEMBER GEESMAN: Caroline
17 Farrell.

18 MS. FARRELL: Good morning, my name is
19 Caroline Farrell. I'm an attorney with the Center
20 on Race, Poverty and the Environment, based in
21 Delano. And I thank you very much for the
22 opportunity to comment today.

23 With the Commission's permission we'd
24 like to submit written comments within the next
25 couple of days. Our main concern is we work with

1 Valley groups throughout the Valley that are
2 concerned about air issues. And of primary
3 concern to us is the fact that some of the
4 emission reduction credits may not be valid. And
5 this creates a lot of uncertainty about the
6 opportunity, the mitigation measures, to actually
7 improve air quality.

8 So, I understand that you'll be taking
9 testimony today on those issues. And based on
10 that testimony we'd like to submit written
11 comments within the next couple of days. Would
12 that be possible?

13 HEARING OFFICER WILLIAMS: Yes, that
14 certainly would be possible. We expect to
15 conclude on those issues today. As you said, we
16 will be taking the testimony today. So you should
17 have all the information that you need. And once
18 you get that, I'm not sure when we're going to
19 have a transcript.

20 Typically we get our transcripts two to,
21 well, maybe up to three days after the proceeding,
22 depending upon how long it is. I don't know if
23 you would need the transcript to make your
24 comments. But we would certainly entertain --
25 they are posted on our website when we receive

1 them.

2 So to the extent that you would need the
3 transcript for your comments we can accommodate
4 that.

5 MS. FARRELL: Okay, well, thank you very
6 much.

7 HEARING OFFICER WILLIAMS: Okay.

8 ASSOCIATE MEMBER GEESMAN: Midge Godwin.

9 MS. GODWIN: I am Midge Godwin and I'm a
10 resident of San Joaquin, and a volunteer down at
11 our Senior Center.

12 We very very much hope that we get this
13 plant because I think it will not only improves
14 the energy in the Valley, but most of California
15 needs more energy.

16 And we're very happy that you're here
17 today and invited us to come.

18 ASSOCIATE MEMBER GEESMAN: Thank you
19 very much, ma'am.

20 HEARING OFFICER WILLIAMS: Thank you.

21 ASSOCIATE MEMBER GEESMAN: Abbie
22 Hufford.

23 MS. HUFFORD: Hello. I'm a member of
24 the senior citizens, and I just made the remark to
25 our City Manager that I hope this energy plant

1 comes in, because we need some new roads in San
2 Joaquin.

3 (Laughter.)

4 ASSOCIATE MEMBER GEESMAN: Thank you,
5 ma'am.

6 Are there any other members of the
7 public that would care to address us before we get
8 started with the rest of the hearing?

9 MS. RAMOS: Commissioner, just a moment.
10 I'd like to be able to translate to some of our
11 Spanish people --

12 ASSOCIATE MEMBER GEESMAN: Certainly.
13 (Pause.)

14 MS. RAMOS: Everything is fine, thank
15 you.

16 ASSOCIATE MEMBER GEESMAN: Thank you,
17 Ms. Ramos.

18 HEARING OFFICER WILLIAMS: Okay, if the
19 parties would introduce themselves. We'll start
20 with the applicant.

21 MR. HARRIS: I'm Jeff Harris; I'm
22 Counsel for the applicant, Calpine.

23 MR. RUBENSTEIN: Gary Rubenstein with
24 Sierra Research; we're air quality consultants for
25 the applicant.

1 MR. ARGENTINE: I'm Mike Argentine,
2 Project Manager with the applicant, Calpine. And
3 to my right is John Carrier, who is a consultant
4 to the applicant with CH2MHILL.

5 HEARING OFFICER WILLIAMS: Staff.

6 MR. KRAMER: From the staff I'm Paul
7 Kramer, the Staff Counsel. And because the mike
8 won't reach some of the others, we have at the
9 table, our consultant, Dr. Alvin Greenberg; Mike
10 Ringer of air quality staff; and Keith Golden,
11 also of air quality staff; another consultant,
12 Will Walters.

13 MR. TRASK: And I'm Matt Trask, Project
14 Manager Siting Division.

15 MR. FREITAS: Keith Freitas, intervenor.

16 HEARING OFFICER WILLIAMS: Okay.

17 MR. TRASK: Mr. Williams, I'm also
18 representing the Public Adviser today. The Public
19 Adviser is Roberta Mendonca, and she's not able to
20 make it today. We've left some materials over on
21 the table there that basically give a little
22 description of the plant and a little bit about
23 our process. And if any members of the public are
24 concerned or have questions, Ms. Mendonca's card
25 is over there. And she would be the person, or

1 myself, to contact with any questions or concerns
2 that you may have. My card is over there, as
3 well.

4 HEARING OFFICER WILLIAMS: I'd note,
5 too, that we also have a phone hookup. Do we have
6 anybody on the line at this time?

7 MR. ARGENTINE: No, we do not.

8 HEARING OFFICER WILLIAMS: Okay. A few
9 housekeeping matters before we get started. I
10 would note that the Committee will resume
11 scheduled evidentiary hearings tomorrow in
12 Sacramento beginning at 1:00 p.m.

13 Thereafter, if necessary, we will resume
14 hearings on Friday, also in Sacramento, at 10:00
15 a.m.

16 We have an exhibit list that has been
17 prepared. And I would encourage everyone to look
18 at it and let me know if there are any changes
19 that are required as we move through the
20 proceedings. We need to keep the exhibit list
21 current and accurate.

22 And I would also note that exhibits 20
23 and P that we talked about yesterday, that we
24 reserved admitting until Mr. Freitas had had an
25 opportunity to review those documents. Have you

1 had an opportunity to review those documents, Mr.
2 Freitas?

3 MR. FREITAS: The exhibits that were
4 submitted?

5 HEARING OFFICER WILLIAMS: Yes, they
6 are --

7 MR. TRASK: These two documents here
8 that are staff's response to applicant's changes.

9 MR. FREITAS: Yes. The original
10 memorandum, right?

11 HEARING OFFICER WILLIAMS: Right.

12 MR. TRASK: Correct.

13 MR. FREITAS: And then the secondary
14 memorandum?

15 HEARING OFFICER WILLIAMS: Right.

16 MR. FREITAS: Right. Yeah, yes, I have.

17 HEARING OFFICER WILLIAMS: Any objection
18 to admitting these?

19 MR. FREITAS: No, absolutely -- well,
20 I'd like to make just a note for the record.

21 HEARING OFFICER WILLIAMS: Okay.

22 MR. FREITAS: One comment note. I
23 noticed that the second memorandum dated February
24 13th included a concern by applicant regarding
25 VIS, or Visual-7 in visual impacts. That was not

1 included in the original memorandum.

2 I just wanted to make a note of that. I
3 thought that was --

4 HEARING OFFICER WILLIAMS: Okay.

5 MR. FREITAS: -- kind of interesting why
6 it was not included in the original memorandum,
7 unless I'm missing something.

8 MR. TRASK: It's this one, the first one
9 that came out on February 11th covered every area
10 except visual resources. And this is visual.

11 MR. FREITAS: Except visual. So this
12 was what covered what they didn't cover. Okay.

13 HEARING OFFICER WILLIAMS: Okay, thank
14 you for that clarification. Okay, we'll admit 20
15 and P, staff's 20 and P.

16 Let me just say for the record that our
17 evidentiary hearings are formal in nature, similar
18 to court proceedings. The purpose of the hearings
19 is to receive evidence, including testimony, and
20 to establish the factual record necessary to reach
21 a decision in this case.

22 Applicant has the burden of presenting
23 sufficient substantial evidence to support the
24 findings and conclusions required for
25 certification of the proposed facility.

1 The order of testimony will be taken as
2 follows today. Applicant, staff, the Committee
3 will sponsor the San Joaquin Valley Air Quality
4 Control District, and then intervenor Freitas.

5 Witnesses will testify under oath or
6 affirmation. During the hearings the party
7 sponsoring the witness shall establish the
8 witness' qualifications and ask the witness to
9 summarize the prepared testimony.

10 Relevant exhibits should be offered into
11 evidence at that time. At the conclusion of a
12 witness' direct testimony the sponsoring party
13 should move in all relevant exhibits into
14 evidence.

15 The Committee will next provide other
16 parties an opportunity for cross-examination,
17 followed by redirect and recross-examination as
18 appropriate. Multiple witnesses may testify as a
19 panel. The Committee may also question the
20 witnesses.

21 Upon conclusion of each topic area we
22 will invite members of the public to offer unsworn
23 public comment. Public comment is not testimony,
24 and a Committee finding cannot be based solely on
25 such comments. However, public comment may be

1 used to explain evidence in the record.

2 We're going to pick up today with the
3 topic of air quality. And unless the parties have
4 any other thing to offer at this time, we'll move
5 right to applicant and its presentation on air
6 quality.

7 Okay.

8 MR. FREITAS: Just one quick one. Could
9 we add to that exhibit 5 on the videotape flooding
10 of the Yuba Basin, parentheses 1995? Would that
11 be okay to do that?

12 HEARING OFFICER WILLIAMS: Sure.

13 MR. FREITAS: Make that change? So we
14 can identify that more clearly with a date.

15 HEARING OFFICER WILLIAMS: Yeah, just
16 make a note of it --

17 MR. FREITAS: I think it's marked on it.

18 HEARING OFFICER WILLIAMS: Okay.

19 MR. TRASK: The tape is marked as such.

20 MR. FREITAS: Thank you.

21 HEARING OFFICER WILLIAMS: Okay.

22 Applicant.

23 MR. HARRIS: Thank you, Mr. Williams.

24 I'd ask that the witness be sworn, please.

25 HEARING OFFICER WILLIAMS: Yes.

1 Whereupon,

2 GARY RUBENSTEIN

3 was called as a witness herein, and after first
4 having been duly sworn, was examined and testified
5 as follows:

6 DIRECT EXAMINATION

7 BY MR. HARRIS:

8 Q Thank you. Could you state your name
9 for the record, please?

10 A Yes, my name is Gary Rubenstein.

11 Q And what subject matter testimony are
12 you here to sponsor today?

13 A At this time I'm here to sponsor
14 testimony in the area of air quality.

15 Q And were the documents that you
16 sponsored as part of your testimony previously
17 identified in your prefiled testimony?

18 A Yes, they were.

19 MR. HARRIS: Those documents are in
20 attachment 1 on page 39 of the applicant's
21 prefiled testimony. There are a list of exhibits.
22 I will run through them quickly.

23 The first one is exhibit 1, AFC chapter
24 8.1; the second one is AFC -- which is exhibit
25 1 -- AFC appendix 8.1, also exhibit 1. Supporting

1 air quality analysis, part of exhibit 1, as well.
2 Supporting air quality analysis for chapter 8.6,
3 also part of exhibit 1. Supporting references for
4 the plume visibility, again part of exhibit 1.

5 Data adequacy supplements, exhibit 3.1.
6 Data response set 1A, exhibit 3A.1. And a new
7 item, data response set 2A, which has been given
8 the number 4A.1. The comments on the staff
9 assessment exhibit 3A.2.

10 The remaining items, 4A.2 through 4A.51
11 are on the tentative exhibit list, and with the
12 indulgence of the parties I'm not going to read
13 all of those. I would note those for the record,
14 though.

15 BY MR. HARRIS:

16 Q Do you have any changes, corrections or
17 clarifications for your testimony?

18 A No, I do not.

19 Q And were these documents prepared either
20 by you or at your direction?

21 A Yes, they were.

22 Q Are the facts stated therein true to the
23 best of your knowledge?

24 A Yes, they are.

25 Q Are the opinions stated therein your

1 own?

2 A Yes, they are.

3 Q And do you adopt this as your testimony
4 for this proceeding?

5 A Yes, I do.

6 Q Could you briefly summarize your
7 qualifications for the Committee and the members
8 of the audience, please.

9 A Yes. I have a bachelor of science
10 degree in engineering from the California
11 Institute of Technology. Upon graduation I went
12 to work as a staff engineer for the California Air
13 Resources Board. And when I left the Air Board in
14 1981 I was the Deputy Executive Officer for
15 Technical Programs.

16 For the last 21 and a half years I've
17 been senior partner with the firm of Sierra
18 Research, responsible for the firm's programs
19 related particularly to stationary sources of air
20 pollution.

21 I've participated in feasibility studies
22 in licensing cases for over 13,000 megawatts of
23 generating capacity over the last 20 years. And
24 an example of those proceedings particularly
25 before the Commission are included in my written

1 testimony.

2 Q Thank you. I'd like to now turn to a
3 short summary of your testimony, and specifically
4 the conclusions you reached with regard to local
5 and regional air quality issues.

6 So, let's start with local air quality
7 issues. Can you summarize your testimony with
8 regard to local air quality issues, please.

9 A Yes. Our review of the localized air
10 quality impacts of the project really rests on
11 three elements. The first element is the use of
12 best available control technology. Obviously the
13 way to minimize any project's emissions and air
14 quality impacts is to use the best control
15 technology available to minimize the emissions in
16 the first place.

17 And so as part of our impact analysis
18 for localized impacts we insured that the project
19 was using best available control technology.

20 The second element of a localized air
21 quality impacts analysis relates to a dispersion
22 modeling analysis or an air quality impact
23 analysis. In that analysis we take a look at
24 worst case operating conditions for the plant. We
25 combine that with worst case weather conditions.

1 And we combine that with worst case existing air
2 quality levels, even if all three of those can't
3 physically happen at the same time.

4 The superposition of those worst case
5 assumptions generates a very conservative
6 conclusion. And with that type of analysis we're
7 able to demonstrate that the project would not
8 cause any new violations of any state or federal
9 air quality standards.

10 The third element of our localized
11 impact analysis is the screening level health risk
12 assessment. In that risk assessment we look to
13 insure that the project doesn't cause any health
14 risks associated again with worst case operation
15 of the plant, worst case weather conditions. And
16 the combination of those two again leads to a very
17 conservative result.

18 In summary, we found that the project
19 will not cause any localized air quality impacts
20 or health risks under any operating conditions or
21 under any weather conditions.

22 Q Thank you. Now let's turn to the second
23 issue, the potential regional issues. Would you
24 describe your testimony there, please.

25 A There are also three elements to the

1 regional air quality analysis that we did. The
2 first element is once again use the best available
3 control technology. And as I said, we insured
4 that the plant was equipped -- would be equipped
5 with best available control technology.

6 The second element is an air quality
7 impact analysis which takes into account existing
8 air quality levels as well as the project's
9 impacts, again in a very conservative manner. And
10 in that case we determined that the project would
11 contribute to existing violations of various state
12 and federal air quality standards for ozone and
13 particulate matter.

14 The third element of the regional
15 analysis is a review of mitigation. And in
16 particular the provision of emission offsets to
17 satisfy the local District's requirements. The
18 provision of those offsets serves to mitigate the
19 cumulative impacts associated with the project's
20 contribution to the preexisting air quality
21 standards.

22 The emission offset program has been in
23 effect in this District and throughout most of
24 California for over 20 years now. And has been
25 demonstrated to be an effective programmatic

1 approach to mitigating growth in emissions from
2 stationary sources such as this project.

3 In addition to insuring compliance with
4 the District's offset requirements, we did an
5 additional analysis that took a look at whether
6 all of the project's emissions of ozone and PM10
7 precursors would be mitigated consistent with the
8 approach that has been used by the CEC Staff in
9 previous siting cases. And our conclusion here
10 again is that all of the project's impacts will be
11 mitigated.

12 Again, the provision of emission offsets
13 in the form of mitigation, as well as in
14 satisfaction of the District's regulatory
15 requirements, is part of the regional analysis.
16 It is not related to localized impacts.

17 We have to show that the project's
18 localized impacts are not significant without
19 regard to any offsets or mitigation that we
20 provide. And then on top of that we have to
21 demonstrate that the regional impacts are
22 addressed through the use of the offsets and the
23 mitigation program.

24 With that analysis my conclusion was
25 that with the provision of the emissions offsets

1 and the use of best available control technology
2 the project would not result in any significant
3 regional impacts or significant cumulative air
4 quality impacts.

5 Q So, overall your findings are, again, no
6 significant impacts, is that correct?

7 A That's correct.

8 Q And you find compliance with applicable
9 laws, ordinances, regulations and standards, as
10 well?

11 A Yes, we did.

12 Q Before turning to the areas of
13 disagreement, I think there's a perception out
14 there that there's a wide area of disagreement,
15 when, in fact, there's large areas of agreement
16 between the staff and the applicant.

17 So, before going to those areas of
18 disagreement, could you briefly elaborate on what
19 you think is the common ground between the
20 applicant and the other parties?

21 A There is basic agreement in terms of
22 what the best available control technology
23 requirements are for the project. In addition,
24 there are a total of, I think it's over 60
25 conditions of approval that have been required

1 either by the Air District or by the CEC Staff.
2 And we are in substantial agreement, I believe, on
3 all but three of those conditions of approval at
4 this point.

5 So the areas of agreement are quite
6 broad. Of course, today we're going to be
7 focusing just on those areas where the remaining
8 disagreement for the Committee to hear and
9 resolve.

10 Q Thank you. Proving that I am a lawyer,
11 now I want to focus on the areas of disagreement.
12 But I did think it was important to set the stage
13 for those agreements.

14 Let's talk a little bit about the areas
15 of disagreement, specifically let's start with the
16 issues related to construction questions that have
17 been raised. Can you summarize your testimony
18 there, please?

19 A Yes. There's several issues in which I
20 disagree with the staff's conclusion regarding
21 construction impacts and mitigation requirements.
22 First relates to the staff's rejection of an
23 analysis that we had prepared last August revising
24 the air quality impact analysis for project
25 construction.

1 That revision was a more refined
2 analysis consistent with other analysis we had
3 submitted in other proceedings during the prior
4 six to nine months. And the staff rejected that
5 analysis for reasons that I discussed in my
6 written testimony, and relied upon their own
7 separate analysis.

8 Without belaboring the issue we think
9 that the staff's rejection of our analysis is
10 without foundation. And in my personal experience
11 it's unprecedented to see them simply wholesale
12 reject a supplemental analysis like that.

13 And to the extent that the staff's
14 conclusions regarding construction impacts and
15 mitigation rely on their analysis rather than
16 ours, I think they're flawed.

17 The second element of disagreement
18 relates to the meteorological data and the
19 treatment of the meteorological data that were
20 used in analyzing construction impacts. Again,
21 and this is a first in my experience, the staff
22 has modified the meteorological data set in a
23 manner that appears to me to be inconsistent with
24 EPA guidelines, prior to doing their analysis,
25 because the staff disagreed with the outcome of

1 EPA's meteorological reprocessing program.

2 As an applicant we certainly wouldn't
3 have the ability to do that, nor do we suggest
4 that. And we think it's inappropriate for the
5 staff to be using a modified meteorological data
6 set in that manner.

7 In addition, we believe the staff has,
8 because they relied on our older original
9 estimates, substantially overstated the project's
10 emissions impacts during construction. Both of
11 those lead, in my opinion, lead staff to conclude
12 the construction impacts are much greater than
13 they actually are.

14 The result of that over-statement of
15 impacts, I believe, is that the staff has required
16 several conditions which, in fact, are unique to
17 this project, or are unique in the history of the
18 CEC's licensing of various projects.

19 And I want to focus on two of them.
20 First is condition AQC-3, which is a condition
21 that, in great detail, delineates the elements of
22 the dust mitigation program. In virtually all
23 prior proceedings the staff has, instead, required
24 the applicant to prepare a dust mitigation
25 program. And do that on a site-specific and

1 project-specific basis.

2 My concerns with the conditions of AQC-3
3 are twofold. First, many of the conditions that
4 are required to be included in the dust control
5 plan either duplicate, or in some respects, go
6 well beyond the very detailed provisions of the
7 San Joaquin District's fugitive dust rules.

8 And then second of all, there's one
9 particular provision of AQC-3 requiring the use of
10 soot filters on construction equipment which I'll
11 discuss in a minute.

12 With respect to the dust mitigation
13 measures, there are really two possible
14 approaches. One would be to painstakingly go
15 through the 15 or 20 subelements of AQC-3 and try
16 to identify which ones would be acceptable and
17 which ones would not, recognizing again that most
18 of them are variations on elements of different
19 mitigation plans that other applicants and Calpine
20 have submitted in other proceedings; but which
21 have been laid out here all at once.

22 The second approach, which I recommend
23 in my testimony, and which I think is more
24 appropriate in this case, is in contrast to many
25 other of the Commission's siting proceedings,

1 we're dealing with an Air District that actually
2 has a well defined and very detailed set of
3 fugitive dust control rules. There are only a few
4 Air Districts in the state that have dust control
5 rules this detailed. The San Joaquin District is
6 one of them.

7 Quite a lot of attention has been placed
8 on those rules in the last couple of years because
9 of the District's nonattainment status. In fact,
10 alleged deficiencies in those rules were the cause
11 of sanctions that EPA had imposed on the District
12 a couple of years ago. Those deficiencies have
13 been corrected; the sanctions have been lifted.

14 And I think it makes eminent sense for
15 this Commission to adopt those requirements as the
16 basis for the dust mitigation program for this
17 project. Fundamentally there is nothing different
18 about constructing a power plant as opposed to
19 constructing any other source that might be
20 subject to District regulation 8.

21 MR. FREITAS: Excuse me. Can I just
22 ask, would you mind very much, I'm having a real
23 hard time following you because of your speed.

24 MR. RUBENSTEIN: I'll try and slow down.

25 MR. FREITAS: Is there any way --

1 MR. RUBENSTEIN: I will.

2 MR. FREITAS: Thank you.

3 BY MR. HARRIS:

4 Q Number three.

5 A The second element of the construction
6 mitigation that we're concerned about is the
7 requirement for the installation of soot filters
8 on all large construction engines, except in cases
9 where it's not technically feasible.

10 This is a variation on a condition that
11 I personally have been involved in negotiations
12 with staff on at many prior proceedings. In all
13 of those prior proceedings that requirement was
14 framed as a requirement to either use the
15 certified 1996 or newer nonroad engine. Basically
16 the new standard for construction equipment, new
17 being a relative term, it's been in effect for
18 some seven years now.

19 Or alternatively to use a soot filter if
20 you're going to use an older engine.

21 In staff's proposal in this case they
22 have proposed to require both 1996 certified
23 engines and the use of soot filters. And I
24 believe that's inappropriate for a couple of
25 reasons. First, there's nothing unique with

1 respect to the risk of diesel particulate

*****9 creates a potential legal problem. The
federal

10 government has preempted all states from the
11 regulation of motor vehicle exhaust emissions.
12 That preemption goes back approximately 25 years.

13 The State of California, and in
14 particular the California Air Resources Board is
15 the only agency in the country that is allowed to
16 regulate motor vehicle emissions independently of
17 the EPA. And they have to obtain a waiver from
18 EPA for each such action.

19 Now, that preemption only applies to new
20 motor vehicles in most cases. And that's why it's
21 never been an issue that's come up before the
22 Commission.

23 However, in a relatively unique case
24 that actually goes back to, I believe it's 1996,
25 when EPA first adopted their nonroad engine

1 standards, a court, and I believe it was the DC
2 Circuit Court of Appeals, but I'm not certain of
3 that, the court held, in response to a lawsuit,
4 that the preemption when it comes to nonroad
5 engines applies to both new and used equipment.
6 Meaning that states are preempted from
7 establishing new emission requirements for nonroad
8 engines.

9 Now, this hasn't been an issue in
10 previous CEC proceedings because the way that this
11 condition has always been worded is you could
12 either use a 1996 certified engine or use an older
13 engine with soot filters. You don't run into the
14 preemption problem. Because if you use an older
15 engine there are no federal standards, there is no
16 preemption issue. In this case, however, you do
17 run into that problem.

18 Now there is a voluntary program that
19 EPA encourages states to use for the retrofit of
20 emission controls to diesel engines. Retrofitting
21 controls to -- whether it's a car or a truck or a
22 piece of construction equipment, is problematic
23 because federal law and federal regulations
24 prohibit people from tampering with emission
25 control design in any system. And adding on a

1 component can be viewed as tampering.

2 As a result, EPA has established
3 guidelines for what does and does not constitute
4 tampering. And in the case of nonroad engines,
5 they've actually listed seven or eight or ten
6 modifications that they have reviewed, as well as
7 for onroad truck engines -- seven or eight or ten
8 modifications that they've reviewed that they
9 conclude would not constitute tampering.

10 When it comes to the retrofit of soot
11 filters EPA has concluded that the retrofit of
12 soot filters to onhighway trucks and buses of
13 certain types would not constitute tampering.
14 They have not made that conclusion with respect to
15 nonroad engines.

16 So, for a number of reasons this change
17 in the Commission's position regarding
18 requirements of soot filters on newer nonroad
19 engines is problematic, both in terms of the lack
20 of demonstrated need, in my opinion, in this case;
21 as well as potential conflicts with both federal
22 regulations and federal anti-tampering guidelines.

23 So, for that reason, regardless of how
24 the Committee decides to resolve the issue of the
25 duplication between the staff's conditions and

1 AQC-3 and the District requirements, I think it's
2 imperative that the Commission not approve, I
3 believe it's paragraph Q in AQC-3, which requires
4 the soot filters as an additional requirement.

5 There's a separate paragraph that
6 requires the 1996 engines and another requirement
7 that requires the use of ultra-low sulfur fuel.
8 We don't have any problems or objections to those
9 conditions.

10 I believe that concludes my comments on
11 the construction impacts and mitigation issue.

12 Q On AQC-3. And in your prefiled
13 testimony you've actually offered up a revised
14 version of that condition, is that correct?

15 A Yes, I did.

16 Q Okay. I won't ask you to walk through
17 that one here, but it's in the prefiled.

18 Would you like to turn now to AQC-5?

19 A Right, in my testimony I also expressed
20 concern about AQC-5. That is a condition that
21 requires upwind and downwind monitoring of PM10
22 during project construction impacts.

23 I noted in other proceedings where this
24 has been an issue the CEC Staff is relatively
25 unique among regulatory agencies in imposing such

1 a requirement.

2 There is a requirement of a similar
3 nature in the fugitive dust rules in the South
4 Coast air basin, but that only applies to projects
5 that do not want to use the prescribed dust
6 control measures that are in that rule.

7 So, do an upwind and downwind monitoring
8 as an alternative to having an effective dust
9 control plan.

10 The San Joaquin District does not
11 require upwind/downwind monitoring in the area of
12 extensive dust control rules. Again, the
13 Commission Staff is unique in doing that. And to
14 the best of my knowledge the Commission has never
15 required upwind and downwind monitoring of
16 construction impacts in any project.

17 The only possible exception to that is
18 in the case of the Los Esteros Critical Energy
19 Facility, where the applicant agreed to a
20 demonstration program of upwind and downwind
21 monitoring. And that requirement was clearly
22 indicated on the record during that hearing as
23 being related to the project's accelerated
24 construction schedule; and in particular, the fact
25 that earthmoving activities were likely to occur

1 around the clock for the first one to two months.
2 Meaning that you'd have extensive dust moving
3 activities during periods when you had poor
4 dispersion.

5 So there were some fairly unique
6 circumstances there which resulted in a
7 requirement and an agreement to perform an
8 demonstration project. Flat-out monitoring of
9 upwind and downwind impacts has never been
10 required by the Commission, to my knowledge. And,
11 again, it goes way beyond what air districts
12 require in terms of mitigation and regulation of
13 dust impacts during project construction.

14 For that reason in my testimony I
15 recommend that AQC-5 be deleted.

16 Q So, again, the major distinction between
17 the demonstration project at Los Esteros and this
18 project is the 24-hour-a-day construction, is that
19 correct?

20 A It is the 24-hour construction and the
21 fact that it was a demonstration project. It was
22 not a routine project.

23 Q Thank you. Okay, if we can, can we
24 leave construction impacts and move on to a
25 discussion about the emission reduction credits?

1 A Yes.

2 Q Why don't we begin with the issue of the
3 SO2 reductions.

4 A One of the areas of disagreement between
5 the applicant and the staff has to do with the
6 adequacy of the mitigation that's been provided.
7 And in particular, the staff is asserting that
8 because the project has small amounts of SO2
9 emissions, and because the Air District does not
10 require SO2 emissions to be offset under the
11 District's rules, that we have an unmitigated
12 impact because sulfur dioxide is a precursor to
13 PM10.

14 While all of that is certainly true, on
15 two separate occasions in this proceeding we've
16 submitted analyses to the staff demonstrating that
17 using an analytical technique the staff has used
18 in other proceedings, where they simply tally up
19 the project's emissions and the emission reduction
20 credits to be surrendered for each pollutant.

21 We've shown that we have provided
22 sufficient excess mitigation for PM10 to mitigate
23 our SO2 impacts in this case, as well. And
24 frankly, I'm at a loss as to why those two
25 analyses are not discussed in the staff's

1 assessment. This is an analytical technique that
2 has been used in many other proceedings. Most
3 notably it was relied upon by the Commission in
4 the case of the Tracy Peaker Project most
5 recently, where that same approach was used to
6 conclude that no additional offsets beyond what
7 the District required would be necessary.

8 I include in my testimony a summary as
9 to why we believe we've provided the adequate
10 mitigation in this case. And I don't see
11 anything, again, unique in this project that would
12 warrant using a different analytical methodology
13 than has been used before.

14 Q Thank you. Let's turn now to AQC-7, and
15 the ERC issue related to the 1990 issue. Could
16 you summarize your testimony on that issue,
17 please.

18 A Yes. The issue related to pre 1990
19 credits is a dispute over accounting methods
20 between the San Joaquin District and EPA that
21 dates back over ten years. The correspondence
22 between those two agencies that I've seen as far
23 back as 1992 on this issue.

24 And in short, the problem is that when
25 the 1990 Clean Air Act amendments were adopted

1 they required states, and in this case air
2 districts, to develop air quality plans that take
3 a look at -- and forecast what air quality was
4 going to be like five, 10 or 15 years into the
5 future.

6 Doing that forecast requires a
7 combination of establishing a baseline emissions
8 inventory; knowing what you've got going into the
9 air at some point in time. A project of what
10 growth in emissions will occur over that interval
11 of time. A projection of what emission controls
12 will be adopted and how effective they will be
13 over that period of time. And then a dispersion
14 modeling analysis, or actually an air modeling
15 analysis, to evaluate how those changes in
16 emissions will affect air quality.

17 And it's a fairly extensive and
18 complicated analysis that takes ones, if not tens
19 of millions of dollars to perform. It's an
20 analysis that's performed in detail typically
21 every five to ten years.

22 And how you treat emission reduction
23 credits has been a source of some confusion and
24 some controversy over the years. The thing you
25 have to assure is that you're properly accounting

1 for growth in emissions. And the dispute between
2 EPA and the Air District, which has been played
3 out in several other air districts in California,
4 over the same period of time, relates to how
5 emission reduction credits generated from
6 reductions that occurred before November 15, 1990
7 are accounted for in that accounting system. How
8 do they show up in the baseline. How are they
9 treated in the growth projections. How are they
10 reflected in the control assumptions.

11 The Air District, the San Joaquin Air
12 District, has consistently taken the position that
13 they believe they're doing the analysis correctly
14 and consistent with EPA guidelines. EPA has
15 almost as consistently raised questions about
16 whether the District's treatment of these credits
17 has been adequate.

18 But all of this really goes to the
19 context of the planning, the air quality planning
20 program, rather than any individual projects.
21 Because we're dealing with emission reduction
22 credits which are used for specific projects, this
23 broader battle obviously entangles, and has over
24 the years from time to time entangled, specific
25 individual projects.

1 But fundamentally this is a dispute over
2 how air quality planning is performed. And
3 ultimately EPA has to approve the District's air
4 quality plan. And if the District doesn't do it
5 right, EPA will say no.

6 In the review that I've done of not so
7 much the District's air quality planning efforts,
8 but of how particular these types, pre-1990 ERCs
9 are used, I can understand certainly the
10 frustration both agencies feel, because they've
11 been arguing about this for ten years.

12 But fundamentally, in terms of what I
13 think the important conclusion is for the
14 Commission, is that there are no regulations of
15 any kind that prohibit the use of the pre-1990
16 ERCs proposed for this project anywhere. There
17 are no regulations that prohibit its use.

18 And since what we're dealing with here
19 is fundamentally an issue of compliance with LORS,
20 I think that's an important conclusion to
21 understand. There are disputes between EPA and
22 the District over how air quality planning is
23 done. And there are EPA guidance documents, some
24 of which have been cited both by us and by the
25 staff, that relate to the circumstances under

1 which pre-1990 ERCs can or should be used.

2 But fundamentally there's nothing in the
3 San Joaquin District's new source review rule, or
4 in their banking rule that prohibits the use of
5 these credits for this project. And there's
6 nothing in any state law, and there's nothing in
7 any federal regulations.

8 In fact, if you take a look at the
9 federal new source review program it is absolutely
10 silent with respect to pre-1990 ERCs. Doesn't
11 talk about them at all.

12 And so what we're dealing with here is
13 this dispute between agencies on a policy basis
14 over how planning should be done, and that dispute
15 is drifting over into a siting proceeding. But
16 there are no LORS, laws, ordinances, regulations
17 or standards, that prohibit the use of these
18 credits for this project.

19 Consequently we believe that the
20 District's issuance of the final determination of
21 compliance is appropriate because they have
22 determined that our use of these credits complies
23 with their rules. And I believe that it does.

24 Q Just so we have a clear record on this
25 point, because I think it's an important one. In

1 terms of any limitations on pre-1990 ERCs, are
2 there any District regulations that would limit
3 those?

4 A No.

5 Q Are there any state laws that would
6 limit those?

7 A No.

8 Q Any federal laws that would limit those?

9 A No.

10 Q And any federal regulations that would
11 limit those?

12 A No.

13 Q Thank you. Okay, given your
14 understanding of what the EPA requirements are,
15 the state and federal laws, do you have an idea
16 for a revised AQ-7 that would satisfy these
17 requirements?

18 A Yes, I believe that a revised version of
19 AQ-7 could be crafted to basically restate the
20 provisions of state law as they apply to the
21 Commission's responsibilities with respect to
22 insuring that adequate offsets are provided.

23 And there's some language that I
24 prepared that includes both a discussion of this
25 issue and the proposed revised condition.

1 MR. HARRIS: Okay, so with the
2 Committee's indulgence we're going to provide some
3 draft language that Mr. Rubenstein's been working
4 on. It's a two-page document. We provided this
5 to staff earlier. And we can walk through that
6 language.

7 But essentially what we're proposing
8 here is an alternative that mirrors state law,
9 that allows the Commission to draft a condition, a
10 substitute AQC-7, that parallels the language in a
11 recent amendment to the Public Resources Code.

12 BY MR. HARRIS:

13 Q So now that that's document been
14 distributed, Mr. Rubenstein, why don't we walk
15 through our --

16 HEARING OFFICER WILLIAMS: Mr. Harris,
17 before you do that, is this on the exhibit list?

18 MR. HARRIS: No, it's not. It's fresh
19 off the computer from this morning.

20 HEARING OFFICER WILLIAMS: Okay, why
21 don't we mark it then.

22 MR. HARRIS: Okay, the next number I
23 guess would be 4A.52, I believe.

24 HEARING OFFICER WILLIAMS: 4A.52?

25 MR. HARRIS: I'll have someone smarter

1 than me confirm that, but that's my recollection.

2 (Pause.)

3 MR. HARRIS: Yes, it would be 52.

4 HEARING OFFICER WILLIAMS: Okay.

5 ASSOCIATE MEMBER GEESMAN: Mr. Williams.

6 HEARING OFFICER WILLIAMS: Yes.

7 MR. KRAMER: This is starting to sound
8 like an oral legal brief to me, rather than a
9 recitation of facts. And would be argued down the
10 road in briefs. And I'm not sure it's appropriate
11 at this point. I'd like to lodge -- if he wants
12 to testify about facts that would support such a
13 condition, that's fine. But if he just wants to
14 make a legal argument in advance of all the
15 testimony, I think that's inappropriate.

16 MR. HARRIS: Actually what we're asking
17 Mr. Rubenstein to do is just to do essentially a
18 LORS compliance analysis. There is a state law on
19 this point, it's the recent amendment to SB-28X.
20 And just as the staff assessment includes an
21 analysis of LORS compliance --

22 HEARING OFFICER WILLIAMS: Before you go
23 any further I'm going to overrule the objection.
24 You may continue.

25 MR. HARRIS: Okay, thank you.

1 BY MR. HARRIS:

2 Q Mr. Rubenstein, can you briefly describe
3 the document we just distributed, and more
4 importantly the rationale for the proposed change
5 to AQC-7?

6 A Yes. In attempting to find a condition
7 that would substitute for AQC-7 and provide the
8 Commission with adequate assurance that the
9 District's offset requirements are, and will
10 continue to be, satisfied, I looked at the new
11 version of Public Resources Code section
12 25523(d) (2) that was amended by SB-28X.

13 In particular, when reviewing that
14 language I saw that there were two sets of
15 provisions. First, there are two optional paths
16 that the Commission can take to determine whether
17 or not the District's offset requirements have
18 been satisfied.

19 And the second of those two paths really
20 relates to the purchase of emission offsets from a
21 state bank under the emergency siting program a
22 couple of years ago, which is not really relevant
23 to this case. And so I'm just going to focus on
24 the first path.

25 And then in addition there's a provision

1 that requires that the Commission adopt a
2 condition of certification to enforce the offset
3 requirement.

4 But first let me take a look at that
5 first path I mentioned as to how you can get that
6 far.

7 Q And that's what's designated as option
8 one in the language above, is that correct?

9 A That's correct.

10 Q Under that first path there are four
11 elements that have to be satisfied, in my opinion,
12 before the Commission can approve the project
13 related to offsets.

14 First is that the Air District must
15 present a certification regarding the status of
16 offsets for the project.

17 Second is that the certification must be
18 made prior to licensing of the project.

19 The third is that the certification must
20 indicate that complete offsets for the project
21 have been identified.

22 And then last, the District
23 certification has to indicate that offsets will be
24 obtained, as distinguished from identified, prior
25 to the time required under the District's rules.

1 In my opinion, reviewing the District's
2 final determination of compliance for this
3 project, that determination of compliance
4 satisfies all four of those steps.

5 And as a result I think the Commission
6 can make a finding that, with respect to offsets,
7 this project complies with LORS.

8 And then we move to the second part of
9 the language 25523(d)(2). And that's the
10 conditions obligation to establish a condition of
11 certification.

12 Q Is this the language that's bolded and
13 underlined near the first indented paragraph?

14 A Yes, that is.

15 Q Thank you. Continue, please.

16 A On the second page of my handout is a
17 revised version of AQC-7 that I have drafted that
18 I believe addresses that requirement. And it
19 pretty much parallels the language in the Public
20 Resources Code.

21 I believe that there is no reason for
22 the Commission to go beyond that language, as the
23 staff's version of AQC-7 does, because ultimately
24 the whole purpose of this exercise is for the
25 Commission to assure itself that the LORS,

1 particularly the District's requirements regarding
2 offsets, will be satisfied.

3 There are no unique offset requirements
4 that the Commission is imposing in this case.
5 They are merely seeking to insure that the
6 District's requirements are satisfied. And
7 consequently I think that the version of AQ-7 that
8 I've proposed addresses the Commission's
9 obligations in that regard.

10 Q So, again, just to be clear. The
11 language of the condition you proposed on the
12 second page is essentially modeled on the
13 underlying language on the first page at the end
14 of the first paragraph, is that correct?

15 A That's correct.

16 Q And so by modeling it on the statute,
17 you've reached the conclusion that will be
18 consistent with the statute?

19 A That's correct.

20 Q Thank you. Let's turn briefly to
21 another issue related to the emission reduction
22 credits, and that's the issue of pre-1993, I
23 believe, PM10 credits. Can you summarize your
24 testimony on that issue, please.

25 A Yes. In the staff assessment addendum

1 the staff objected to several of the emission
2 reduction credits that have been proposed for this
3 project because they were PM10 emission reduction
4 credits created from emission reductions that
5 occurred prior to 1993.

6 The staff cited as a basis for their
7 concern a letter that EPA had sent to the San
8 Joaquin District regarding the Pastoria Energy
9 Facility several years ago.

10 However, the San Joaquin District
11 responded to EPA's letter regarding the Pastoria
12 project, and neither the San Joaquin District nor
13 the California Air Resources Board nor EPA has
14 raised this question with respect to the San
15 Joaquin Energy Center.

16 And so what we have here in contrast
17 with the situation of the pre-1990 ERCs for NOx
18 and VOC, where there's clearly a dispute between
19 EPA and the District. In the case of the pre-1993
20 ERCs for PM10, there is no dispute between EPA and
21 the District. There's no dispute between any of
22 the air quality agencies, and none of the air
23 regulatory agencies have suggested that there's
24 any question about the validity of these credits.

25 MR. FREITAS: Excuse me. Did you say --

1 could you repeat that again? I'm sorry. Did you
2 say pre and post?

3 MR. RUBENSTEIN: I said pre-1993 PM10
4 credits.

5 MR. FREITAS: So there is --

6 MR. RUBENSTEIN: I'm sorry, I had too
7 much caffeine this morning.

8 MR. FREITAS: That's all right, there is
9 a dispute or there is no dispute?

10 MR. RUBENSTEIN: There is not a dispute
11 regarding pre-1993 PM10 credits.

12 MR. FREITAS: Thank you.

13 MR. RUBENSTEIN: There is a dispute
14 regarding pre-1990 VOC and NOx credits. And that
15 dispute was what I discussed at length earlier
16 this morning.

17 MR. FREITAS: Thank you.

18 MR. RUBENSTEIN: I won't go into all of
19 the details that I lay out in my written
20 testimony, but this, too, is unprecedented in my
21 experience in that we have no disagreement among
22 the air regulatory agencies, and the CEC Staff is
23 proposing a different interpretation of the
24 District's rules, and concluding that these ERCs
25 are not satisfying the District's rules and are

1 invalid for use, when the Air District reaches
2 exactly the opposite conclusion.

3 BY MR. HARRIS:

4 Q So to be clear again, are there any
5 District rules that would place limitations on the
6 use of pre-1993 ERCs?

7 A No, there are not.

8 Q Are there any state laws that place such
9 limitations?

10 A No, there are not.

11 Q Are there any federal regulations that
12 place such limitations?

13 A No, there are not.

14 Q And are there any federal statutes that
15 place such limitations?

16 A No, there are not.

17 Q Let's move on now to the final ERC
18 issue, the issue that's been raised by staff
19 regarding purported shutdown emission credits.
20 Can you summarize your testimony there, please?

21 A Yes. In the staff assessment addendum
22 the CEC Staff has argued that some of the ERCs
23 proposed for use by the San Joaquin Valley Energy
24 Center are invalid because they involve shutdown
25 of emission units, and in particular they refer to

1 shutdowns at major stationary sources.

2 Similar to the pre-1993 PM10 credit
3 issue that I just discussed, on this issue of
4 major source shutdowns, there is no dispute
5 between the air agencies. Neither the Air
6 District nor the California Air Resources Board
7 nor EPA has found any reason to question emission
8 reduction credits associated with shutdowns.

9 And let me back up a second. There are
10 really only two ways to create an emission
11 reduction credit. One is to retrofit emission
12 controls to an existing source. And the second is
13 to shut down an operating source.

14 There's a slight variation on that in
15 that you can curtail operations of an existing
16 source, but that doesn't happen very often. So
17 fundamentally it's either you retrofit emission
18 controls or you shut down a source.

19 Consequently emission reduction credits
20 from source shutdowns are fairly common. And
21 they're getting more and more common all the time
22 because it's harder and harder to find more
23 controls to retrofit when the Air Districts are
24 requiring people to retrofit controls all the
25 time. And you can't take credits twice.

1 If the Air District requires you to
2 retrofit controls that means that the credit for
3 that reduction goes to the air quality plan. And
4 you don't get an emission reduction credit for it.

5 As a result, you'll find that for most
6 projects most of the ERCs that you see are
7 associated with the shutdown of emission units.

8 The staff, in my mind, has misapplied
9 this principle largely because they don't
10 distinguish between the shutdown of pieces of
11 equipment at an individual source and the shutdown
12 of an entire stationary source.

13 The CEC Staff is relying on a provision
14 in District regulations which addresses this
15 issue. And, again, in contrast to the other two
16 ERC issues where there are no District regulations
17 on the topic, in this case there is a District
18 regulation. And it's in rule 2201. And it's
19 section 4.13.1. And this is specifically
20 referenced in my written testimony.

21 That regulation indicates that you can't
22 use emission reduction credits from the shutdown
23 of a major source unless those credits are
24 properly accounted for in an EPA-approved
25 attainment plan. And the key here is that rule

1 refers to the shutdown of a major stationary
2 source.

3 The CEC Staff has taken that and
4 interpreted It to mean the shutdown of any
5 equipment at a major stationary source; or in
6 their case, potentially at any stationary source,
7 depending on which version of their testimony you
8 look at.

9 That interpretation, to the best of my
10 knowledge, is inconsistent with the interpretation
11 that the San Joaquin District provides.

12 Q So, Mr. Rubenstein, that's an important
13 distinction that I think I'd like you to discuss a
14 little further. So the distinction there is
15 between a major source and emissions units, is
16 that correct?

17 A Right. A stationary source is the term
18 of art that's use to describe an entire industrial
19 facility. It includes many emission units where
20 an emission unit is any single identifiable piece
21 of equipment or process.

22 For example, in the case of the San
23 Joaquin Valley Energy Center, the entire project
24 that's before you, from a licensing perspective,
25 in terms of all of the equipment on that site,

1 would constitute the stationary source.

2 One of the gas turbines would be an
3 emissions unit. Emergency fire pump would be an
4 emissions unit. Cooling tower would be an
5 emissions unit.

6 And the distinction in that District
7 rule is, continuing this analogy, whether the
8 entire stationary source was shut down, meaning
9 the entire facility was shut down. Or whether the
10 individual emissions unit was shut down, meaning
11 for example, one of the gas turbines was retired.
12 That's the distinction that I believe the staff is
13 not making when they read that section.

14 When I review in detail the list of ERCs
15 that we proposed for this project I don't see that
16 we have, at least based on the information we've
17 received from the District, I don't see that we
18 have any major stationary sources that have been
19 shut down.

20 Now, that's the first part of it. The
21 second part of it is that the rule doesn't say you
22 can't use credits from a major stationary
23 shutdown. It says you can't use them unless
24 certain air quality planning requirements are met.
25 Which gets us back to the discussion we were

1 having earlier regarding pre-1990 ERCs.

2 However, in this case there is a
3 specific rule. And what we're dealing with on
4 this issue is the CEC Staff disagreeing with the
5 San Joaquin District regarding the interpretation
6 of one of the San Joaquin District's rules.

7 And in my opinion, the District is the
8 agency charged with implementing that regulation,
9 not the CEC Staff. And if the District makes a
10 certification that the credits are valid, then I
11 think the Commission should be relying on that
12 certification.

13 Q Thank you. I want to turn to one last
14 issue, and that would be the proposed rule that
15 was issued by EPA on Thursday, February 13, 2003.

16 MR. HARRIS: And, Mr. Williams, I have a
17 copy of that proposed rule which I assume that the
18 EPA witness was going to make part of their
19 exhibit, but if you'd like, we can make it our
20 exhibit, as well.

21 MR. KRAMER: Go ahead, but could you
22 give us the Federal Register page? That might be
23 helpful.

24 MR. HARRIS: It's page 7330 of the
25 Federal Register, Thursday, February 13, 2003.

1 MR. KRAMER: I ask only because there
2 were three filings that day.

3 MR. HARRIS: We're just referring to the
4 one, based on that.

5 MR. FREITAS: Mr. Williams, I don't have
6 a copy of that. Is there a way to get a copy of
7 that?

8 (Pause.)

9 BY MR. HARRIS:

10 Q Mr. Rubenstein, can you briefly
11 summarize the issue set forth in that rule, and
12 more specifically, how it affects this particular
13 project?

14 A Yes. A couple of years --

15 HEARING OFFICER WILLIAMS: Excuse me,
16 before you get started, is this something that
17 needs to be marked, as well? Or is it --

18 MR. HARRIS: We probably should give it
19 a number.

20 HEARING OFFICER WILLIAMS: Yeah, let's
21 make it next in order, which would be, I think,
22 52?

23 MR. HARRIS: 53.

24 HEARING OFFICER WILLIAMS: 53? Okay.

25 //

1 BY MR. HARRIS:

2 Q Okay, go ahead, Mr. Rubenstein.

3 A A couple of years ago, I'm not recalling
4 exactly when, but it's shown in the rulemaking
5 notice, EPA formally notified the San Joaquin
6 District that they were partially approving and
7 partially disapproving the District's new source
8 review program because of three specific
9 deficiencies.

10 And this concept of partially approving
11 and partially disapproving the rule is actually a
12 term of art EPA uses on a quite regular basis.
13 And the notion of formally identifying
14 deficiencies that must be correct is also a part
15 of the rulemaking process for EPA.

16 The three deficiencies that EPA
17 identified related to the District's exemption
18 from permit requirements of agricultural related
19 operations. This is an issue that has been in the
20 press quite a bit recently. But it's actually
21 been an ongoing battle for over 20 years.

22 The second deficiency related to
23 provisions in the District rules that EPA believed
24 could allow some major sources of pollution to net
25 out of the federal equivalent of the best

1 available control technology requirement,
2 basically avoid it.

3 And the third deficiency was related to
4 the District's failure to have in place a tracking
5 system adequate to demonstrate that the District's
6 emission offset requirements were at least as
7 effective as would be the case if the District was
8 literally and strictly implementing the federal
9 new source review program.

10 As I'd mentioned earlier, EPA actually
11 has their own new source review rules, which are
12 implemented in very few parts of the country. But
13 EPA uses those to step in in cases where they
14 believe an agency's not doing an adequate job.
15 And EPA also uses their own new source review
16 program as a guideline in evaluating other
17 district programs.

18 And the purpose of this tracking system
19 was to make sure that the District's program for
20 offsets was as least as effective as EPA's.

21 There are many differences between the
22 offset requirements that the District implements
23 as contrasted with EPA. One example is that the
24 District requires emission offsets for far more
25 sources, and far smaller sources than EPA's

1 program would require.

2 Countering that in terms of stringency
3 is the fact that District does not require offsets
4 for 100 percent of a facility's emissions. It
5 only requires offsets for an amount that exceeds a
6 particular threshold.

7 And a third difference is that there are
8 different offset ratios that are required. The
9 District, in general, requires higher offset
10 ratios than the EPA requirements do.

11 And so you can see that a tracking
12 system like this is going to take into account
13 some the plus and minuses of all the programs.
14 And what EPA said in their rulemaking a couple of
15 years ago is they want a specific written
16 agreement with the District to have a tracking
17 system so that everyone can see very clearly that
18 the District's program is more effective. And in
19 the event the District's program is not as
20 effective, they want some automatic changes to
21 occur that would increase the effectiveness.

22 The rulemaking that EPA proposed last
23 Thursday on the 13th would find that the District
24 addressed all three of those concerns. The
25 rulemaking included a discussion of issues

1 regarding pre-1990 emission reduction credits and
2 major source shutdown credits.

3 However, the rulemaking did not find
4 that the San Joaquin District's program was
5 deficient in either of those two areas. It
6 expressed concerns; it indicated what types of
7 things EPA believes the District needs to do in
8 its planning efforts to make sure that the
9 accounting is done right. And this is
10 fundamentally an accounting issue.

11 But EPA did not formally indicate a
12 deficiency either with respect to pre-1990 ERCs or
13 with respect to major source shutdowns.

14 And so, in short, what EPA proposed to
15 do last Thursday was to improve the San Joaquin
16 District's new source review program.

17 Q And to be clear, that proposed approval
18 also does not have a prohibition or a limitation
19 on the use of pre-1990 ERCs, is that correct?

20 A That's correct.

21 MR. HARRIS: Give me just a moment to
22 confer.

23 (Pause.)

24 MR. HARRIS: I think that completes our
25 direct testimony. We'd move our documents into

1 evidence if that's the appropriate time, or wait
2 until after cross.

3 HEARING OFFICER WILLIAMS: Yeah, let's
4 wait until after cross.

5 We're going to take our lunch break at
6 this point before we start cross-examination. So,
7 we'll go off the record for lunch.

8 (Whereupon, at 12:43 p.m., the hearing
9 was adjourned, to reconvene at 1:24
10 p.m., this same day.)

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1 AFTERNOON SESSION

2 1:24 p.m.

3 HEARING OFFICER WILLIAMS: Staff, are
4 you ready to go?

5 MR. KRAMER: Just about, take about a
6 minute.

7 (Pause.)

8 HEARING OFFICER WILLIAMS: Go right
9 ahead, we're on the record.

10 MR. KRAMER: Oh, I'm sorry.

11 CROSS-EXAMINATION

12 BY MR. KRAMER:

13 Q Mr. Rubenstein, regarding condition AQC-
14 3, you've requested it's deletion of most of the
15 provisions, correct?

16 A That's correct.

17 Q Did you specifically, among those
18 provisions you requested to be deleted, include
19 the application of chemical dust suppressants?

20 A Yes, as a method separately identified
21 from compliance with the District requirements in
22 regulation 8.

23 Q Okay, so you're still planning to apply
24 those chemical dust suppressants?

25 A Yes.

1 Q Now, is your plan that the Commission
2 should just trust you to do that when you think
3 it's necessary? Is that what you're saying, in
4 essence?

5 A No. I think that the Commission should
6 require that the applicant provide the Commission
7 with copies of all plans and compliance reports
8 that are required by reg 8 as a means of insuring
9 that, for example, dust suppressants are applied
10 as necessary.

11 There's an additional condition that I
12 have not proposed to delete, which is AQC-4, which
13 establishes specific performance requirements
14 which, I believe, will also help the Commission to
15 insure that things such as the application of dust
16 suppressants are applied as necessary.

17 Q Are you familiar with the filing that
18 the applicant made, it was called the group one
19 testimony? The cover letter is dated January 27,
20 2003. I don't have the date it's docketed, but
21 printed from the electronic version.

22 It discussed all the issues except air
23 quality and noise.

24 A I'm generally familiar with it. I
25 haven't reviewed it in any detail.

1 Q Okay, there were some changes that were
2 proposed to the conditions of certification
3 regarding waste management.

4 MR. HARRIS: Can you direct us to a page
5 on that?

6 MR. KRAMER: Yeah, I got page 110 on the
7 bottom of mine. Do you have a copy there that you
8 can show him?

9 MR. RUBENSTEIN: I have an electronic
10 copy I can bring up in just a second.

11 MR. KRAMER: Okay.

12 MR. HARRIS: Paul, again this is the
13 group 1 testimony?

14 MR. KRAMER: Group 1, yes.

15 MR. HARRIS: Okay, which is basically
16 everything but air and --

17 MR. KRAMER: Noise and maybe visual --

18 MR. HARRIS: -- visual.

19 MR. RUBENSTEIN: I'm sorry, Mr. Kramer,
20 what page did you say this was on?

21 MR. KRAMER: 110. It might be -- you'd
22 have to look at the page number at the bottom.

23 MR. TRASK: I have an extra copy right
24 here.

25 MR. HARRIS: Can you tell us the words

1 or --

2 MR. RUBENSTEIN: -- the printed page
3 number?

4 MR. KRAMER: Yes, at least on mine it
5 was printed on the bottom right corner.

6 MR. RUBENSTEIN: 110? Okay, I have that
7 page in front of me.

8 MR. KRAMER: Okay, it starts with Roman
9 IV near the bottom.

10 BY MR. KRAMER:

11 Q Could you read the second paragraph that
12 begins with the label Waste-6?

13 A Yes, that paragraph begins, quote,
14 "Fourth sentence requires additional dust
15 suppression methods to be identified and a dust
16 suppression plan that must be submitted to DTSC
17 and the CPM. COC AQC-3 requires preparation and
18 submittal of a fugitive dust mitigation plan. In
19 addition, AQC-3 lists specific dust mitigation
20 measures to be implemented during construction,
21 including application of chemical dust
22 suppressants, stabilization of disturbed areas,
23 and frequent watering of unpaved roads, among
24 others."

25 Did you want me to continue?

1 Q No, thank you. And then further down on
2 that page, if you carried over to page 111, the
3 applicant proposes that some sentence be
4 deleted -- two sentences be deleted from Waste-6.

5 Could you read the sentences that are
6 struck through there, proposed for deletion?

7 A Yes, the two sentences that are struck
8 through there are: During site preparation
9 additional dust suppression methods shall be
10 implemented to prevent generation of dust. The
11 project owner shall identify these measures and
12 frequency of implementation in a plan to be
13 submitted to DTSC for review, and to the CEC CPM
14 for review and approval."

15 Q Tell me if I'm wrong, but what I
16 interpret this request as is to remove the
17 requirement for dust suppression in this condition
18 and part of the rationale which you read earlier
19 was that there were very specific requirements in
20 condition AQC-3.

21 Yet, -- and your testimony asked that
22 those specific requirements of AQC-3 be deleted.
23 So I'm wondering if you can reconcile the apparent
24 inconsistency between this waste request and your
25 request today in your testimony.

1 A I've not seen the language in the waste
2 section until now, and I understand your question.
3 I think to reconcile the two I would modify the
4 language that I have proposed in AQC-3 to
5 specifically require that the dust mitigation plan
6 that's prepared to satisfy the San Joaquin
7 District's rules under regulation 8 also be
8 provided to the CEC CPM.

9 And I believe that would then provide a
10 comparable level of review as to what was
11 originally proposed. And would make the two sets
12 of sections consistent together.

13 Q Okay, you speak about a level of review,
14 but what about protection for the onsite workers?
15 Are they protected by the mere fact that some
16 agency reviews a plan? What about the standard
17 that actually causes something to be done, i.e.,
18 dust suppression applications to protect their
19 health and safety?

20 MR. HARRIS: Can you un-compound that,
21 please?

22 BY MR. KRAMER:

23 Q You just mentioned review. But what
24 about -- do you believe that your proposal
25 provides a level of protection to the onsite

1 workers that was intended by the language that's
2 proposed for deletion in condition Waste-6?

3 A I didn't perform any reviews of onsite
4 worker safety and so I really can't answer your
5 question.

6 Q Turn to your request regarding condition
7 AQC-5. There you've asked that the condition be
8 deleted, correct?

9 A That's correct.

10 Q And this condition requires real-time
11 monitoring PM10 concentrations?

12 A That's correct. During construction
13 activities.

14 Q Right. How is it going to be possible
15 to know whether the various strategies that the
16 applicant will use to control PM10 are working
17 properly without some method of measuring it in
18 real time?

19 A Actually I believe that the language
20 that I proposed provides more protection in that
21 regard than most previous Commission siting
22 decisions. And that's through the provision of
23 condition AQC-4, which establishes a specific
24 performance test to be implemented by the onsite
25 mitigation manager.

1 That test, which I believe to be very
2 practical and very effective, is simply a visual
3 observation for dust plumes, and requirement that
4 additional mitigation be implemented if dust
5 plumes are observed that exceed those criteria.

6 That condition has not been, to the best
7 of my knowledge, implemented in any other siting
8 cases. And consequently I think that the level of
9 protection it provides exceeds what has been
10 provided in previous siting cases.

11 Q Can PM10 be seen by the naked eye?

12 A An individual particle of PM10 cannot,
13 but plumes that contain PM10 certainly can be
14 seen.

15 Q Okay, so what is it that's visible in
16 that plume? Is it particles that are PM10 sized
17 or below, or is it other dust that happens to be
18 cohabitating the air with the PM10?

19 A It's going to be a mixture of the two.

20 Q So I gather you're presuming that PM10
21 always travels with dust of larger sizes that is
22 visible?

23 A No. I'm saying that for the types of
24 activities at this time, I believe an opacity
25 requirement will be effective in controlling PM10,

1 as well as total particulates.

2 Q Can a person readily see 150 mcg
3 concentration of PM10 in the ambient air?

4 A I don't know the answer to that question
5 off the top of my head.

6 Q Is it true that the instruments that
7 would be used under condition AQC-5 could detect
8 PM10 concentrations at levels that would not be
9 detectable by the visual method that you describe
10 in AQC-4?

11 A At the location where the monitor is,
12 yes.

13 Q You earlier referred to the Tracy case,
14 I believe, in your discussion of the SO2 offsets?

15 A That's correct.

16 Q Do you know, did the applicant -- is the
17 applicant going to be required to offset SO2 in
18 that case?

19 A The best of my recollection the
20 applicant was not required to provide any offsets
21 in excess of the District requirements. And I
22 don't believe the District requirements for
23 offsets applied to SO2 in that case.

24 Q Okay. Did the applicant propose to
25 provide it on its own?

1 A Are you referring to the additional
2 mitigation program?

3 Q I believe as a part of its application,
4 its initial package.

5 A The only thing I'm aware of -- I didn't
6 review its initial application, I reviewed the
7 Commission's decision. And to the best of my
8 knowledge the only offset requirements contained
9 in the Commission's decision related to
10 satisfaction of the District offset requirements,
11 and an additional mitigation program that the
12 applicant offered to complete. And that
13 additional mitigation program was expressly stated
14 in the Commission's decision to be unrelated to
15 CEQA in any conclusions of significance regarding
16 impacts.

17 Q Okay, but that doesn't answer my
18 question. In the Tracy case did the applicant
19 propose to provide SO2 offsets? Whether or not it
20 was required by the Commission.

21 A I don't know.

22 Q When you were talking about the issue of
23 major source shutdowns and the District's rule
24 regarding that, you said, and I believe I'm
25 quoting you accurately, based upon, quote,

1 "information available to the Energy Commission"
2 end of quote, that there were no major source
3 shutdowns involved in the list of offsets that are
4 being provided for this project, is that correct?

5 A Not quite. I think what I said is based
6 on information available to me from the District.

7 Q Okay, I guess I heard you differently.

8 A If I did say that I misspoke, Mr.
9 Kramer.

10 Q Okay.

11 A I do not recall saying it that way.

12 Q Earlier you suggested that the staff's
13 modeling of PM10, I think it was construction
14 emissions in general, assumed longer operating
15 hours in each day than the applicant is
16 realistically going to actually achieve and
17 conduct, is that correct?

18 A I didn't refer to that today, but I did
19 discuss that in my written testimony.

20 Q Okay. Is the applicant willing to agree
21 to limit the hours of construction to the number
22 of hours that you've assumed in your modeling?

23 MR. HARRIS: I'm going to object to the
24 form of the question. You might be able to
25 rephrase it to get where you're going. But, as

1 stated, it's argumentative.

2 HEARING OFFICER WILLIAMS: Overruled.

3 MR. HARRIS: Can you repeat the question
4 then?

5 BY MR. KRAMER:

6 Q Is the applicant willing to agree to an
7 operational limit -- not operational limit, but a
8 limit on the hours of construction that would be
9 equal to the number of hours that you believe --
10 that you used as a basis of your modeling?

11 A The short answer is no, not exactly.
12 It's my understanding that there are going to be
13 some limits placed on construction operations and
14 other disciplines I think related to noise. And
15 we usually try to insure that our modeling
16 assumptions are consistent with what we expect
17 those conditions will be.

18 I've never seen the Commission impose a
19 limit on the construction duration specifically
20 related to air quality in any prior proceeding.
21 And I'd be uncomfortable recommending to the
22 applicant that they accept one in this case.

23 Q You compared this project to Los Esteros
24 regarding PM10 mitigation, I believe, correct?

25 A Specifically related to the issue of

1 AQC-5, the PM10 monitoring. I believe that's the
2 only comparison that I made.

3 Q Okay. And you characterized Los Esteros
4 as a pilot project?

5 A The monitoring aspect of it was a
6 demonstration project, right.

7 Q Right. And didn't believe that it
8 should be carried forward in this case, correct?

9 A That's correct.

10 Q Los Esteros is in the Bay Area Air
11 Quality Management District, correct?

12 A That's correct.

13 Q And to your knowledge does that area
14 have the same lower or higher level of ambient
15 PM10 than the area in which this project will be?

16 A Comparing specifically the Los Esteros
17 project site and this project site, I don't know
18 the answer to that question off the top of my
19 head.

20 Q Okay, what about comparing the two
21 Districts, the Bay Area versus San Joaquin?

22 A Comparing the two Districts broadly I'm
23 not certain either, although I think that the San
24 Joaquin District -- well, the San Joaquin District
25 is a nonattainment area for the federal PM10

1 standard. And the Bay Area District is an
2 attainment area. So, in general terms, the San
3 Joaquin District would have higher PM10 levels
4 than the Bay Area.

5 Q And wouldn't that argue in favor of more
6 careful control of PM10 emissions in the San
7 Joaquin District, since it has a greater PM10
8 problem than the Bay Area?

9 A Yes, and that's why the San Joaquin
10 District has regulation 8, which is an extensive
11 set of dust control rules and the Bay Area
12 District does not have a comparable regulation.

13 Q Do you consider the San Joaquin
14 District's dust mitigation rules to be as strict
15 as the standards that were proposed by the
16 Commission Staff in AQC-3, 4 and 5?

17 A I don't know. I'd have to do a point-
18 by-point comparison of each of the provisions in
19 order to answer that question.

20 Some of the provisions I know I
21 identified in my testimony as being more
22 restrictive in the staff's proposal as compared
23 with the San Joaquin District's rules.

24 Q And again in an area where PM10 is a
25 significant issue, what is inappropriate about

1 controlling it to the maximum extent that is
2 feasible?

3 A You didn't ask me about control, you
4 asked me about stringency, which is because the
5 CEC Staff's provisions are more stringent doesn't
6 necessarily mean they're more effective.

7 For example, I don't believe that the
8 ambient monitoring provision will contribute
9 measurably to the effectiveness of the PM control
10 program. But it's certainly more stringent.

11 Q Well, monitoring isn't intended to
12 improve effectiveness, it's simply intended to
13 prove it, isn't it?

14 A I'm sorry, yes. But your original
15 question, you asked me about AQC-3, C-4 and C-5,
16 which included the monitoring provisions. And so
17 maybe we got off on this train by a
18 misunderstanding.

19 Q Okay. If you don't have a clear sense
20 about the comparison between the District's dust
21 suppression rules and staff's proposed rules, what
22 is it that has informed your decision to request
23 the staff's requirements be deleted?

24 A I believe in my written testimony I
25 itemized several provisions in AQC-3 that I

1 believed were redundant with the District's rules.

2 And in the same portion of my written
3 testimony I identified other provisions where the
4 CEC Staff's requirements were more stringent;
5 although, again, when I say that that doesn't
6 necessarily mean more effective.

7 Q To your knowledge does the San Joaquin
8 District have a currently approved attainment plan
9 for any criteria pollutant?

10 A I'm hesitating because I don't recall
11 the status of the air quality plan for CO, and I
12 don't know whether that would be considered an
13 approved attainment plan or approved maintenance
14 plan.

15 Q Is that the only one where there may
16 possibly be an approved plan in your mind?

17 A Yes.

18 Q Okay, but as far as NOx and PM10 and
19 VOCs, to your knowledge there are no approved
20 attainment plans?

21 A There are no attainment plans for either
22 NOx or VOCs.

23 Q What about ozone?

24 A For ozone there is, to the best of my
25 knowledge there is not, at present, an approved

1 ozone attainment plan.

2 Q And for PM10?

3 A To the best of my knowledge at present
4 there is not an approved PM10 attainment plan.

5 Q The Thursday federal rule that you
6 introduced, exhibit 4A.53, did I hear you
7 correctly near the end of your testimony say that
8 nothing in this rule affected the use of pre-1990
9 emission reduction credits?

10 A Yes.

11 Q Okay. I think it's best if I bring this
12 over to you. I want to ask you to read a portion
13 of this that I've highlighted.

14 MR. FREITAS: Could we get
15 identification from where he's reading from so we
16 could follow along?

17 HEARING OFFICER WILLIAMS: Yeah, I
18 believe 4A.53.

19 MR. FREITAS: Yeah, where at in the
20 document?

21 MR. KRAMER: Sure, page 7-3-3-5, the
22 paragraph in the middle column right at the
23 heading agricultural exemption.

24 MR. RUBENSTEIN: This paragraph is in
25 the background section of the rulemaking notice,

1 and it says, quote, -- the highlighted section
2 says, quote: Based on these findings regarding
3 the creditability of pre-1990 credits, EPA will
4 consider the creditable value of these credits
5 used in the District's tracking system to be zero.
6 EPA therefore encourages the District and sources
7 to avoid using these pre-1990 credits and if
8 problems arise, to work with EPA to explore
9 options for other sources of emission reduction
10 credits."

11 BY MR. KRAMER:

12 Q That's a rather large red flag in the
13 face of an owner of pre-1990 credit, isn't it?

14 A I'm not sure; some actually might
15 consider that to be a green light. It depends on
16 what you mean.

17 Q Well, if you're the owner of a pre-1990
18 credit, would this make you feel comfortable about
19 the value of that credit to you and your ability
20 to use it; either to sell it or to use it on one
21 of your own projects?

22 A If I were to read that paragraph and
23 nothing else in that document, it would.

24 But reading that paragraph in the
25 context of the entire rulemaking action, it

1 actually restores some of my comfort level that
2 the dispute between EPA and the District will be
3 resolved through this tracking mechanism and the
4 preparation of a revised attainment plan.

5 And consequently, it would not raise any
6 greater questions than they already have about the
7 value of a pre-1990 ERC.

8 Q Is that because your understanding prior
9 to receiving this was that pre-1990 credits were
10 in serious jeopardy or had no value at that point?

11 A It's because of the last several months
12 it was my perception, prior to seeing that, that
13 EPA was going to engage in case-by-case attempts
14 to block the use of pre-1990 credits for
15 individual project applicants.

16 And that, to my mind, created far more
17 uncertainty and raised far greater questions about
18 the value of pre-1990 credits.

19 But the rulemaking document, on the
20 other hand, sets forth what appears to me to be a
21 very logical regulatory path to resolving the
22 dispute and placing the onus for resolving it on
23 the San Joaquin District, rather than on any
24 individual ERC holder.

25 Q Now, the San Joaquin District has a

1 history of missing deadlines for filing attainment
2 plans, and other required reports, does it not?

3 A I'm not sure I'd agreed with that
4 characterization.

5 Q They were subject to sanction that was
6 only lifted a couple days prior to the time it
7 would take effect, correct?

8 A Which sanction is it that you're
9 referring to?

10 Q The limited disapproval of the same NSR
11 rule that's proposed for approval in exhibit
12 4A.53, started the sanctions clock, did it not?

13 A Yes, it did.

14 Q And the clock was about to -- the alarm
15 was about to ring at some point in the last couple
16 days?

17 A I thought it was sometime in March, but
18 in any event, you had asked whether sanctions had
19 been lifted, and the answer to your question is
20 no. Those particular sanctions were never
21 imposed. That's what the sanction clock means.
22 It's a clock that starts a countdown process. And
23 at the end of the 18-month period if the
24 deficiencies are not corrected to EPA's
25 satisfaction, then the sanctions will be imposed.

1 But in this particular case the District
2 did not get to that point, and the sanctions were
3 not imposed.

4 Q They got pretty close, though. Turn to
5 your concerns over AQC-7 and your request to
6 modify it, exhibit 4A.52.

7 As proposed by staff the AQC-7 provides
8 a table to list all of the emission offsets that
9 have been proposed for the project. And requires
10 that the Commission approval be obtained if that
11 package is to be modified in any way. Would you
12 agree with that characterization of the staff's
13 proposed condition?

14 Let me modify my question because it's
15 implied that permission to modify the table is
16 required, because any modification to a condition
17 of approval must go to the Commission.

18 It's not actually stated expressly in
19 the rule, but the application of the Commission's
20 rules would require that if you wanted to change
21 one of the offsets or substitute an offset you'd
22 have to come back to the Commission, correct?

23 A Under that condition, yes.

24 Q Yes, okay. And you want to take all
25 that out and just require that the -- well, quote,

1 "any required emission offsets be provided at the
2 time that the Air District's rules require that
3 they be surrendered." Correct?

4 A And rely on the District's rules to
5 enforce the offset requirement, that's correct.

6 Q Does the applicant plan to surrender a
7 different set of offsets than those that are
8 described in the -- were described in its latest
9 filings with the Commission?

10 MR. HARRIS: I'm going to object in that
11 asks for, first off, a legal conclusion, I think,
12 as to whether he can surrender different offsets.
13 And I think it's also irrelevant, that it's not
14 required by the law, again a legal conclusion.

15 MR. KRAMER: There's a legal conclusion
16 in the objection. I guess I would object to that.

17 (Laughter.)

18 MR. HARRIS: See me one, raise me one.

19 MR. KRAMER: I think it's a --

20 HEARING OFFICER WILLIAMS: Do you
21 understand the question?

22 MR. KRAMER: I think it's a fair
23 question.

24 HEARING OFFICER WILLIAMS: Yeah, I think
25 it's a fair question --

1 MR. KRAMER: -- to why do they want to
2 take that out.

3 MR. HARRIS: I think it also calls for
4 speculation on the part of this witness.

5 HEARING OFFICER WILLIAMS: Well, if he
6 knows he can answer it.

7 MR. RUBENSTEIN: I'm not aware of any
8 plans by the applicant to surrender any credits
9 different than those we've identified for this
10 project.

11 BY MR. KRAMER:

12 Q Then what's the problem with committing
13 to bring in the credits that you've provided, or
14 that you've listed at this point in time?

15 MR. HARRIS: I'm going to object again.
16 I think, first off, it's argumentative. And
17 secondly, it requires the witness to answer a
18 question that is a legal question. What --

19 HEARING OFFICER WILLIAMS: Overruled.

20 MR. RUBENSTEIN: My objection to the
21 condition goes to the fact that it goes beyond the
22 requirements of this particular District.

23 Some air districts, in their
24 determination of compliance, list every single
25 certificate number and require that a revision to

1 the determination of compliance or authority to
2 construct be requested in the event that there is
3 a change in any way to the offset package at all.
4 The San Joaquin District does not.

5 And so I object to this as going beyond
6 the requirements of the San Joaquin District.

7 BY MR. KRAMER:

8 Q Okay, please turn again to the EPA-
9 proposed rule that we just discussed, exhibit
10 4A.53. Do I need to bring you a copy again?

11 A I have an electronic copy here.

12 Q Okay. On page 7-7-3 --

13 A I'm sorry, could you restate that page
14 number?

15 Q Seven -- I'm sorry, yeah, I did do it
16 wrong, 7-3-3-3.

17 A Okay.

18 Q In the middle column right above the
19 heading "e", small letter "e", what kinds of
20 emissions reductions will be creditable, please
21 read the portion of that paragraph that begins
22 with the comma, that the new or modified source,
23 to the end of that paragraph.

24 A "The new or modified source must
25 identify the source of the emission reduction to

1 be used to meet the offset requirements; must
2 provide an opportunity for review of the proposed
3 emission reduction credits. And once the ATC is
4 issued, cannot change the emission reduction
5 credits unless a new ATC is proposed identifying
6 the new emission reduction credits to be relied
7 upon."

8 Q Do you understand the District's process
9 to provide a review of any changes to the emission
10 credit package if it's proposed after
11 certification?

12 In other words, would the District's
13 procedures, as you know them, meet this standard
14 that EPA has described?

15 A They might.

16 Q They might. Do you know for sure?

17 A Well, it depends on what the District
18 were to do in the event that the applicant
19 notified them of a change in the credit package.
20 This would be hypothetical since I don't know
21 whether any change will be proposed.

22 But one could comply with that
23 requirement if the District were to issue another
24 public notice indicating that the applicant, at
25 the time they were going to surrender the credits,

1 intended to surrender different credits.

2 In addition, that provision has been
3 interpreted to me to mean that as long as the
4 credits, themselves, had gone through a public
5 comment period, that that would be sufficient.
6 Which is to say, as long as the emission reduction
7 credits had gone through a public comment period
8 before going into the emissions bank, that you
9 could fairly freely replace one set of publicly-
10 noticed comments with another set of publicly-
11 noticed comments.

12 And under no circumstances could you
13 replace credits that had already gone through the
14 public notice process with credits for which no
15 notice had been issued.

16 Q Who provided that interpretation to you?

17 A I've had that interpretation actually
18 from some at EPA Region IX, as well as from some
19 air districts.

20 Q So, are you saying then that the public
21 notice occurs at the time of creation of the
22 credit and its entry into the bank, rather than at
23 the time of its application to a particular
24 project?

25 A I'm saying that that's one possible

1 approach. The specific issue, which I'm thinking
2 related to a change in an offset package that
3 occurred between the issuance of the preliminary
4 determination of compliance and the final
5 determination of compliance, and the question was
6 whether a change in the offset package during that
7 interim triggered the need for a new public
8 notice, which is what the paragraph you asked me
9 to read discusses.

10 And the interpretation was that as long
11 as the credits being substituted were the credits
12 that were already in the bank and had gone through
13 their own public notice procedure, that there was
14 no need for a second notice.

15 Q That notice you're talking about is in
16 the District's process, not in the Energy
17 Commission's process?

18 A That's correct. All of this is in the
19 context of the District's process. I didn't
20 interpret the EPA rulemaking to apply to the
21 Energy Commission process.

22 Q To your knowledge does the District, or
23 did the District, in this case, make an
24 independent analysis under CEQA of the
25 environmental impacts of this project?

1 A I don't know.

2 Q Turn back to your exhibit 4A.52
3 regarding AQC-7.

4 A I have that in front of me.

5 Q You ascribed a purpose to this section
6 of the Warren Alquist Act. Could you repeat that
7 for me? Unfortunately, I didn't write it down.

8 A I'm afraid I'm not recalling that
9 comment, Mr. Kramer.

10 Q As a part of that description of the
11 purposes of this section, do you recall mentioning
12 compliance with the California Environmental
13 Quality Act and/or providing public notice and
14 review of the emission credits, as what you
15 interpreted to be one of the -- two of the
16 purposes of this statute?

17 A No, I sure don't.

18 Q Would you agree that those are purposes
19 of the statute?

20 MR. HARRIS: I'm sorry, can you clarify
21 the question? What do you mean by those?

22 BY MR. KRAMER:

23 Q Compliance with CEQA environmental
24 analysis and providing public review of offsets.

25 A This particular paragraph that I quote

1 in my discussion of AQC-7, no, I wouldn't ascribe
2 either of those purposes to this paragraph at all.

3 Q Okay, thank you. The San Joaquin Air
4 District, geographically is a relatively large
5 District, correct? Among those in California, let
6 me qualify that.

7 A I guess I would put it in the middle
8 group in terms of the size of districts, not the
9 largest.

10 Q Okay. It extends from the Tehachapis in
11 the south, correct? To -- what is the northern
12 boundary?

13 A The northern boundary would be the
14 southern eastern edges of Sacramento and Alameda
15 County lines.

16 Q And under the District rules is an
17 offset at one, say the north end of the District,
18 considered equivalent to an offset that was
19 physically located at the southern end of the
20 District?

21 A That would depend on where the source is
22 that was proposing to use the offset, as to
23 whether they'd be equivalent or not.

24 Q Are you suggesting there's some kind of
25 discounting for distance?

1 A Yes, there is.

2 Q Is that for all of the credits? The
3 various types?

4 A I believe that it is, yes.

5 Q In your paper, exhibit 4A.52, you
6 suggest that the Air District has presented to the
7 Commission a certification, the certification
8 required under the Public Resources Code section
9 you cite.

10 Can you direct us to that certification
11 in the record?

12 A I believe that certification is subsumed
13 within the final determination of compliance. I'm
14 not sure it actually cites that specific section
15 of the Public Resources Code, though.

16 Q Or uses those words? Are you saying
17 it's implied?

18 A I don't think that they use the word
19 certified. I think they use the word perhaps that
20 they find that the offsets have been identified,
21 or in fact they identify the offsets.

22 Q So your understanding they have reviewed
23 a particular package of offsets and analyzed
24 those?

25 A That's correct.

1 Q And determined that they are appropriate
2 for this project?

3 A That's correct.

4 Q Do you believe that the section you've
5 cited, 25523(d) (2) of the Public Resources Code
6 allows the applicant to change the emissions
7 offset package without consulting with the Energy
8 Commission after certification?

9 A On its face I don't see that it
10 addresses that issue one way or another.

11 Q Well, you agree it requires that prior
12 to certification that the offsets be identified,
13 correct?

14 A Yes.

15 Q Does that not imply to you that those
16 same offsets are expected to be surrendered at the
17 time when surrender is required?

18 A Yes, I think that's a reasonable
19 expectation.

20 Q So if they must be identified prior to
21 certification, and there's an implied requirement
22 that those same offsets be used, does it not
23 follow that the Commission's permission must be
24 obtained before the package is changed?

25 A I think that may be a reasonable

1 presumption, although that's a legal conclusion
2 that I would probably defer to counsel.

3 Q Are you familiar with the San Joaquin
4 District's GAMAQI guidelines of --

5 MR. HARRIS: Can you --

6 MR. RUBENSTEIN: The blank stare means
7 no.

8 BY MR. KRAMER:

9 Q Okay. Yeah, I'm definitely in the
10 acronym soup, myself, right now.

11 MR. KRAMER: Can we go off the record
12 for a second.

13 HEARING OFFICER WILLIAMS: Sure, let's
14 go off the record.

15 (Off the record.)

16 BY MR. KRAMER:

17 Q Okay, the San Joaquin Air District
18 has -- they have CEQA guidelines they described to
19 me. The acronym I used is GAMAQI, G-A-M-A-Q-I.
20 And those guidelines have a table 6-4 which
21 includes -- or it's entitled, construction
22 equipment mitigation measures. Are you familiar
23 with that table at all? Or those guidelines?

24 A Yes. I'm sorry. Now that I know what
25 you meant by the acronym, yes, I'm familiar with

1 the document. And I cited it in my testimony.

2 Q Okay. Do you have that in front of you
3 by chance?

4 A No, I didn't bring a copy of that.

5 Q Okay.

6 MR. KRAMER: And I think we just have
7 one copy. But we can make more and provide them
8 tomorrow.

9 HEARING OFFICER WILLIAMS: You want --
10 is it listed as one of your exhibits already?

11 MR. KRAMER: No, no. So this would
12 be --

13 HEARING OFFICER WILLIAMS: So I think 2Q
14 next in order.

15 MR. HARRIS: What's the title? It's
16 probably one of ours.

17 MR. RUBENSTEIN: Guide for --

18 MR. KRAMER: Should we go off the record
19 for a minute?

20 HEARING OFFICER WILLIAMS: Yeah, let's
21 go off the record.

22 (Off the record.)

23 BY MR. KRAMER:

24 Q Mr. Rubenstein, one of the mitigation
25 measures listed in table 6.4 is for construction

1 equipment, is the use of alternative-fueled or
2 catalyst-equipped diesel construction equipment,
3 correct?

4 A That's correct.

5 Q What is your understanding of what an
6 alternative fuel would be, as the term is used in
7 these guidelines?

8 A In the context of controlling the
9 emissions from diesel-fueled construction
10 equipment, which I believe is what that mitigation
11 measure refers to, I believe that term would
12 include the use of natural gas equipped engines,
13 diesel fuel equipped with additives such as
14 PurNOx.

15 In some contexts it might include the
16 use of ultra low sulfur diesel fuel as an
17 alternative fuel. And it might include some forms
18 of biodiesel fuel to the extent that they reduced
19 emissions from the diesel construction equipment.

20 Q Okay, and the term catalyst, is that the
21 soot filters you've been talking about?

22 A I believe that term is used generically
23 to represent both oxidizing catalysts and diesel
24 particulate filters which are also called soot
25 filters.

1 Q Okay, so soot filters is included in the
2 term?

3 A I believe so, yes.

4 Q You're asking to not be required to
5 apply the soot filters, correct?

6 A Not exactly. I was objecting to the
7 combination, the requirement of a combination of
8 1996 or later certified equipment and diesel soot
9 filters.

10 I proposed in the alternative going back
11 to the language that the staff had previously used
12 which would require the use of either 1996
13 certified engines or if you use older engines,
14 have them equipped with soot filters.

15 Q Are you aware of a project in the
16 Central Valley where that was proposed?

17 A I'm sorry, where what was proposed?

18 Q One or the other.

19 A Yes.

20 Q That would be?

21 A The Tracy Peaker project.

22 Q If the soot filters are removed as you
23 request, the PM10 and PM2.5 emissions from that
24 equipment will be greater than if the soot filters
25 were in place, correct?

1 A Yes.

2 Q And would that also be correct for the
3 other emissions from the diesel engine, they would
4 be greater than if the filters were applied?

5 A No.

6 Q Why not?

7 A The soot filters don't control emissions
8 of all pollutants. They only control some
9 pollutants.

10 Q Okay, but for those that they control
11 obviously the emissions would be greater if they
12 are not present, correct?

13 A But that's predominately particulate
14 matter.

15 Q Okay, have you modeled or calculated the
16 cancer risk if the equipment was operated without
17 the filters, as you propose?

18 A Yes.

19 Q And did that risk exceed 10 in one
20 million?

21 A It did right at the boundary of the
22 construction site.

23 Q Now, you understand -- or do you
24 understand the Commission's generally applied
25 criteria for significant impacts to be cancer risk

1 of ten in one million or greater?

2 A As a general rule, that's correct.

3 Q That's a threshold, correct, which
4 requires further study?

5 A That's correct.

6 Q In your opinion, is this risk that
7 you've calculated, does that constitute a
8 significant impact under CEQA?

9 A No, because when we looked at the
10 geographic extent of the area in which the risk
11 exceeded ten in a million, it was quite close, as
12 I said, to the construction site, and I believe we
13 concluded that at the nearest -- at the southern
14 edge of town, the closest point of town to the
15 construction site the risk was on the order of, I
16 think it was tenth, .1 in one million. So it was
17 substantially reduced.

18 Q Okay, but there will be people who will
19 be exposed within the ten in one million area,
20 correct? There'll be at least workers at the
21 site?

22 A I don't know that the Commission Staff
23 has ever applied the ten in one million criteria
24 to worker safety.

25 Q Does proposition 65 apply that standard

1 to workers? If you know?

2 A Yes. Based on the analysis I've done a
3 prop 65 warning notice would have to be placed at
4 the site during construction.

5 I need to correct an earlier answer I
6 gave to you, Mr. Kramer.

7 Q Okay.

8 A I'd said that I believe that the risk at
9 the southern edge of town was approximately .1 in
10 one million. And I misspoke. That was on the
11 order of .1 mcg/cubic meter of diesel exhaust
12 particulate, which corresponds to a risk of one in
13 one million.

14 Q One in one million.

15 MR. FREITAS: I'm sorry, could you
16 identify the southern edge of town?

17 MR. RUBENSTEIN: I'm afraid --

18 HEARING OFFICER WILLIAMS: Before you
19 answer that, why don't you save that question for
20 your cross-examination.

21 MR. FREITAS: Okay.

22 HEARING OFFICER WILLIAMS: Okay.

23 MR. FREITAS: I was just trying to
24 clarify it so I'd know where the reference point
25 is.

1 HEARING OFFICER WILLIAMS: Okay. Yeah,
2 just save it.

3 MR. FREITAS: So I could follow it.

4 HEARING OFFICER WILLIAMS: You'll have
5 an opportunity to --

6 MR. FREITAS: Yeah, I understand. I
7 thought it was an easy question, I'm sorry.

8 MR. RUBENSTEIN: Could we get a five-
9 minute break, please?

10 HEARING OFFICER WILLIAMS: Sure.

11 MR. RUBENSTEIN: Thank you.

12 HEARING OFFICER WILLIAMS: Five minutes.

13 (Brief recess.)

14 HEARING OFFICER WILLIAMS: Back on the
15 record. Okay, where were we?

16 UNIDENTIFIED SPEAKER: Almost finished.

17 (Laughter.)

18 HEARING OFFICER WILLIAMS: We're on the
19 record.

20 MR. KRAMER: No further questions at
21 this point.

22 HEARING OFFICER WILLIAMS: Now, our
23 intervenor, Mr. Freitas. I think you had a
24 question or two.

25 MR. FREITAS: Yeah. It's my turn?

1 HEARING OFFICER WILLIAMS: Yes.

2 CROSS-EXAMINATION

3 BY MR. FREITAS:

4 Q Could you please identify the southern
5 edge of town?

6 A Yes, Mr. Freitas, in the context of that
7 comment I made earlier I was referring to Manning
8 Avenue.

9 Q Okay. And that would represent probably
10 the population base that would be most affected
11 would be north of that Manning Avenue?

12 A Yes, and I use that criterion because in
13 the past when the CEC Staff has dealt with similar
14 issues about health risks from construction
15 impacts they've looked not just at where the
16 maximum impact is, but where the population is.

17 Q Could I draw a real simple analogy for
18 you and then have you respond to that analogy?

19 A Sure.

20 Q It's dealing with the construction
21 pollution. And if I, as a farmer, were to go and
22 get out on my say 1980 John Deere tractor; start
23 it up and drive around the construction site for
24 the whole -- during the whole time of the day that
25 the construction's in progress, would I be

1 emitting equal to or less than the equivalent
2 using a piece of construction equipment with the
3 same horsepower as my tractor, would I be putting
4 more emissions or less emissions under your
5 approach? If you can understand that? I can
6 rephrase --

7 A You're just setting one piece of
8 equipment to another piece of equipment, right?

9 Q Right. If you had ten pieces of
10 equipment with the same equal horsepower, and I
11 put ten tractors with equal horsepower.

12 A Your ten tractors, with those
13 assumptions your ten tractors would be putting out
14 far greater emissions.

15 Q To the tenth power, the fifth power,
16 five times, two times, one time, three times?

17 A I can't get that precise without
18 actually looking up some reference materials, but
19 it would be -- and we're just talking about
20 particulate emissions, or are we talking about all
21 pollutants?

22 Q Well, we're talking about whatever
23 emissions would come out of the diesel engine with
24 like horsepower.

25 A It would be, depending on the pollutant,

1 anywhere from two times, probably, two to five
2 times, or maybe even greater emissions from the
3 tractors as compared to the construction
4 equipment.

5 Q Under your --

6 A Under what we've proposed, right.

7 Q -- your proposal. And your proposal,
8 that would include the post-'96 vehicle engine
9 without a soot filter?

10 A Correct, and the ultra clean diesel
11 fuel, right, both.

12 Q With the ultra clean, okay.

13 A But we could probably clean up your
14 tractors with that ultra clean diesel fuel, as
15 well.

16 Q Right.

17 A Might look at doing that as a mitigation
18 measure.

19 (Laughter.)

20 MR. FREITAS: Yes or no answers, please.

21 (Laughter.)

22 BY MR. FREITAS:

23 Q Why does applicant feel so strongly
24 about not just conceding to the conditions
25 regarding the soot filters, in your opinion?

1 A Well, their position is based, I think,
2 in large part on my recommendation. So I think I
3 can answer that question.

4 I have several concerns about it.
5 Obviously the legal concern about preemption to be
6 overcome if we propose to do it, as opposed to
7 having the Commission require it. But I didn't
8 recommend that we propose it, either.

9 The reason is that the retrofit of
10 something like the soot filter to diesel engines
11 is something that has to be undertaken with great
12 care. It's not like putting a muffler on your
13 car.

14 And there are a host of issues that have
15 to be understood and dealt with to make sure that
16 installing the soot filter doesn't increase back
17 pressure enough to impair the performance of the
18 engine or damage it, or increase its emissions.
19 Because if the soot filter's installed incorrectly
20 you can result in an increase in emissions.

21 Similarly, you want to make sure that
22 the soot filter, itself, is going to function the
23 way it's supposed to. These are fairly expensive
24 pieces of equipment and they require that their
25 temperatures reach a certain level in order to

1 remove the built-up particulates.

2 And that temperature has to be reached
3 on a regular basis and sustained for a long enough
4 time to make sure that the soot filter cleans
5 itself. If that doesn't happen it will simply
6 clog and block up and either you're going to
7 damage the filter or damage the engine or both.

8 I think those kinds of factors are also
9 the reason why the Air Resources Board hasn't been
10 pushing the retrofit of soot filters on
11 construction equipment, because they're engaged in
12 a formal rulemaking process, looking at retrofits
13 of soot filters to a variety of different types of
14 equipment across the state. But they're doing it
15 in a very deliberate manner rather than one
16 project at a time.

17 And the cause for their concern is
18 exactly these issues that I've raised. That they
19 want to make sure that it's done correctly. One
20 bad program where the filters simply aren't
21 installed correctly could damage the state's
22 entire program to try to retrofit this technology
23 across the board.

24 And I think that's another important
25 reason not to pursue it. When you go to EPA's

1 website on their voluntary diesel retrofit
2 program, for example, it's quite striking to see.
3 People have been talking about diesel soot filters
4 for five, six, eight years now.

5 But you don't see EPA saying, oh, yeah,
6 go put it on everything. They say, these are the
7 kinds of applications that we've reviewed and
8 we're sure it will work. And you've got good
9 manufacturer recommendations for doing the
10 installations. And we're sure it will be
11 effective.

12 And putting it on construction equipment
13 is not one of those listed. It just hasn't been
14 studied enough.

15 And so for all those reasons I've
16 certainly recommended against agreeing to a
17 condition like that. The only exception being if
18 there was some items of construction equipment
19 where you can't find the 1996 or newer engine.
20 You can't find a clean engine. You're using a
21 dirtier engine, then I think it does make sense to
22 require the applicant to go out and see whether
23 they can do a targeted retrofit.

24 And one of the reasons why frankly I
25 support that kind of an either/or proposition is

1 because I'm fairly well convinced it will
2 encourage the applicant or the contractor or
3 whoever to go find the newer equipment. Because
4 it's going to be a lot easier to find a newer
5 engine that's designed to be clean than just to
6 figure out how to retrofit a soot filter to an
7 older engine.

8 Q That's really good because that leads me
9 to my next question. Is the equipment owned by
10 the applicant? Or the equipment that's going to
11 be used, proposed to be used on the site, is that
12 owned equipment? Or are you talking about like
13 the contractors that will be hired for the job?

14 And this is kind of a compound question,
15 but would that limit your ability to hire certain
16 contractors over others, if that condition was
17 maintained?

18 A I think I understand all the questions.
19 And I think the answers are that most, if not all,
20 of this equipment would not be owned by the
21 applicant. There would be contractor equipment.

22 And three or four years ago it might
23 have been more restrictive in terms of who the
24 contractors might be, because three or four years
25 ago you'd have to had a pretty new fleet of

1 engines to be sure that everything was 1996 and
2 newer.

3 However, the type of condition that I'm
4 recommending has been imposed on enough projects
5 in California over the last three or four years
6 that I think probably there's a pretty good
7 inventory of equipment to select from.

8 And so you might have problems with some
9 individual contractor who has one special duty
10 crane that's an old, got an old engine in it and
11 has never been retrofit with a soot filter. And
12 they may have trouble getting onto this job site.

13 But for any of the contractors who've
14 got access to a broad range of equipment I don't
15 think it'll be a problem.

16 Q I'm going to have to work backwards on
17 the questioning now. On the soot filters, you
18 mentioned a proposed, I wasn't sure if the word
19 was used proposed or used, at the Tracy Peaker
20 Plant.

21 Mr. Kramer asked you about a project
22 that you were familiar with regarding the use of
23 the soot filters.

24 A I think what Mr. Kramer had asked was
25 whether I was familiar with any projects in the

1 San Joaquin Valley where the CEC Staff had
2 established this either/or requirement. Either
3 use newer engines or use a soot filter.

4 And I answered yes, I was familiar with
5 such a project, and that it was the Tracy Peaker
6 Project where they had imposed that kind of
7 condition.

8 I don't know, in fact, what they've
9 done, which of those two options they've selected
10 or whether it's been some combination of the two
11 in constructing that project though.

12 Q I'm going to use a bare bullet now. In
13 the argument that you made regarding pre-
14 certification and post-certification, I think
15 that's what it boiled down to if I understood it
16 right, regarding applicant's willingness to submit
17 the credits for review.

18 Why does applicant have a problem with
19 that -- or let me put it a different way. Can an
20 applicant, in a process for the approval or the
21 licensing of a power plant, use credits under
22 multiple applications?

23 In other words, if I wanted to build
24 five power plants, could I use a group of credits
25 that I have, and use those credits to make

1 application for five different power plants using
2 the same group of credits?

3 A You might be able to use the same
4 certificate, split the certificate, if you will,
5 into different pieces and have different pieces of
6 the same certificate used for different projects.
7 But, no, you couldn't use the same emissions from
8 the same certificate on different projects.

9 Q How would anyone involved in the
10 licensing process know that they're not being --
11 the same certificates are not being used for
12 multiple projects if they're not submitted before
13 the certification?

14 A Oh, I'm not objecting to the
15 identification of the credits before
16 certification. That's been done in this project.

17 Q Okay.

18 A We have identified them.

19 Q Oh, okay.

20 A And, in fact, one potential
21 inconsistency of a problem of the sort you raised
22 was identified because we identified the credits
23 here. It was disclosed that the same certificate
24 number had been used in two different proceedings.

25 Q Okay. Would it be safe to say that the

1 applicant, as I understand the testimony today,
2 and correct me as I'm saying it if I'm wrong,
3 would it be safe to say that the applicant is
4 basically agreeing to conform and accept the
5 conditions that are being basically disputed over
6 the position of your credits?

7 Is it the applicant's position today, as
8 I understand it, that you would submit to conform
9 and comply with any finding of an ultimate outcome
10 of that dispute as long as it's requisited around
11 state and federal regulations?

12 A I'm not sure I understand your question.

13 Q Let me ask it a different way.

14 A Would you try it again?

15 Q Let me ask it -- The message I picked up
16 today was that the applicant is willing to agree
17 to comply with and be conditioned by any outcome
18 of a dispute over the acceptance of these credits.

19 MR. HARRIS: Keith, can you clarify a
20 dispute between whom and whom?

21 MR. FREITAS: Well, that's what it was
22 brought up that it was a dispute. It was made
23 testimony was that this is -- and I was wondering,
24 it said -- you made the comment that it was a
25 dispute between the District and -- it was used

1 as, the term dispute was used between the District
2 and staff's interpretation of what the District,
3 or what the EPA ruling.

4 I guess what we're dealing with is the
5 EPA, the District and staff. And there's a
6 function of interpretation that's involved in that
7 process.

8 So my question is, if the dispute was
9 adjudicated, just for the lack of a better word,
10 between those three agencies, or between those
11 three entities, would the applicant be willing to
12 live by the final outcome from that dispute?

13 MR. RUBENSTEIN: There are only two air
14 pollution control agencies engaged in the dispute,
15 and that's EPA and the Air District. And I think
16 by the end of today's proceedings hopefully it
17 will be clear that the nature of the dispute is
18 over the adequacy of the District's planning
19 efforts rather than on the acceptability of the
20 ERCs for any individual project.

21 So I'm not sure that there's going to be
22 any need for us to see it adjudicated any issue
23 about the validity of the ERCs for our project at
24 the end of the day.

25 Does that answer your question, or --

1 BY MR. FREITAS:

2 Q Well, it gets me closer, but let's look
3 at AQC-7 under your submitted language today.
4 Familiar with that set.

5 A Okay.

6 Q The applicant shall obtain any required
7 emissions offsets within the time required. If
8 you were to add two or three different words to
9 that sentence you could almost say what I just
10 said.

11 Now, that may be an inference that I'm
12 drawing from maybe some of the testimony or from
13 some of the parties, but --

14 A Well, the distinction I was making --

15 Q -- clear that up for me.

16 A -- is whether you were including the
17 Energy Commission as a party to that dispute and
18 reconciliation process. And the language I've
19 proposed for AQC-7 doesn't make any reference to
20 the Commission's decision as to whether or not
21 credits are valid.

22 What I'm referring to here is whether
23 the credits are valid under the applicable
24 District rules. And it goes on to say consistent
25 with any applicable federal and state laws and

1 regulations.

2 Clearly if the Air District or EPA
3 conclude before we have to surrender the credits
4 that those credits are, for any reason, not valid
5 we're going to have to deal with that. We will
6 not be able to start operation.

7 And I think that language says that and
8 provides that assurance.

9 Q So you're saying in the context of your
10 statement?

11 A Yes.

12 Q Your prepared statement here?

13 A Yes.

14 Q As written? That's the meaning of your
15 prepared statement?

16 A That's my intent.

17 Q That's your intent, that's --

18 A Yeah.

19 Q -- as you just described it. Would it
20 be too presumptive to ask if you could explain to
21 me what an emission credit -- is an emission
22 credit, can it be used up to the date before it is
23 actually, the certificate is exercised? Or do you
24 have to formally go through the process of either,
25 like you said, there's two requirements, you

1 either shut down or you retrofit. There's two
2 ways to make a credit. You either retrofit
3 emission controls or you shut down the emission
4 source.

5 A Right. Those are the two most common,
6 right.

7 Q Two most common. Can you -- you can't
8 actually have a physical certificate of credit
9 until you've done one or two or both of those
10 things, is that correct?

11 A That's correct. A certificate for the
12 credit will not be issued until you've actually
13 reduced the emissions.

14 Q In your particular credits would you say
15 that there's an even balance between what you've
16 done to get the credits, are the credits based on
17 an even amount of retrofit of emissions or from a
18 shutdown, or do you know?

19 A It looks to me like most of our credits,
20 lumping together the NOx credits, the VOC credits
21 and the PM10 credits all together, just treat them
22 all the same, looks to me like on a tonnage basis,
23 most of the tons credits that we've obtained are
24 associated with the retrofit of some kind of
25 controls to equipment rather than shutdowns.

1 But it's not a lot; it's maybe 60
2 percent retrofit, 40 percent shutdown; 70/30,
3 somewhere in that range.

4 Q Does the applicant intend to, and this
5 is maybe out of context from the long lines of
6 subject matter we're discussing, but does the
7 applicant have a process, an internal process, or
8 an internal program whereby it continues, like a
9 continuing education? If you were to equal it to
10 a professional's continuing education, I would
11 equate it to a continuing efficiency search. Like
12 a continuing search for efficiencies on how to run
13 their plant, to maintain and keep up with the most
14 modern day retrofit equipment, things of that
15 nature. Do they have a program that's in place
16 for that?

17 A I'm a consultant just dealing with air
18 quality and not an employee of Calpine's. I
19 really can't answer that question. I suspect that
20 they do, but I'm not the best person to ask that.

21 Q But you didn't come across that in your
22 study or your research?

23 A I've had discussions with different
24 people at Calpine about efficiency improvements
25 that they want to make at plants that they have

1 already started up. So, I know that there is some
2 effort to look for that in general, over time.
3 But I don't know of any formal program of that
4 sort.

5 Q Do you know of any formal incentive
6 programs that are out there today that are
7 incentive programs for companies to pick up
8 emission credits? Or are there emission credits
9 allowed today? Can I shut down my --

10 HEARING OFFICER WILLIAMS: Mr. Freitas,
11 you're kind of going outside the scope of what's
12 been offered as testimony right now.

13 MR. FREITAS: Okay.

14 HEARING OFFICER WILLIAMS: So, in the
15 interest of completing our procedure today, I'm
16 going to have to cut off that line of questioning.

17 MR. FREITAS: Okay.

18 HEARING OFFICER WILLIAMS: Do you have
19 any more questions that are relevant to what --

20 MR. FREITAS: The testimony?

21 HEARING OFFICER WILLIAMS: -- the
22 testimony?

23 MR. FREITAS: Yeah.

24 HEARING OFFICER WILLIAMS: Okay.

25 MR. FREITAS: I have to differ with you,

1 though, Mr. Williams, on your objection. I think
2 that it is relevant whether or not you can obtain
3 credits today or not. I think that was part of
4 their testimony. I think it's clear. And I'll
5 look back on the record when the transcripts are
6 available. I think you'll find that he did
7 testify about we're dealing with energy credits
8 here, with emissions credits. And I think it's
9 relevant whether you can obtain emission credits
10 today or not.

11 HEARING OFFICER WILLIAMS: My concern is
12 not so much relevance, but it appears to be
13 outside the scope.

14 MR. FREITAS: Okay.

15 BY MR. FREITAS:

16 Q Did you do any, in your review, your
17 reports, in your research, did you do any
18 comparisons regarding -- when you came up with
19 your conclusions for the effects of the PM10 and
20 the emissions during the construction phase, did
21 you compare -- did your analysis use, you know,
22 because we had talked earlier about this is an 83-
23 acre, the site is an agricultural end use ag
24 farming. It's currently being farmed right now by
25 a farmer. So the property is being farmed, the

1 site, the construction site.

2 Did you use comparison that were
3 comparisons of farming sites that are being
4 converted to industrial zones for the
5 construction? Or were they comparisons that were
6 using nonfarmed land that were already inside
7 spheres of influence of towns and cities, for
8 example?

9 Do you understand?

10 A I'm not sure what you mean by
11 comparisons. We analyzed the impact, the air
12 quality impacts of constructing and operating this
13 project. We didn't compare that to alternatives
14 such as continuing to till this land and farm it.

15 Q We had testimony yesterday from an
16 expert regarding the inorganics, the compounds
17 that are present like one reference was arsenic
18 from the, inorganic arsenic.

19 And I was just curious if the study or
20 your research would show a comparison that would
21 compare an agricultural field with inorganic
22 arsenics versus an industrial field that's never
23 been farmed probably for many many years and just
24 sat there, been sitting there idle next to an
25 industrial park?

1 A No, we've not done any comparisons like
2 that.

3 Q That wasn't included in your -- that you
4 drew your conclusions from?

5 A No, it was not.

6 Q So I need to ask you questions,
7 monitoring, when you talked about monitoring and
8 the need or the non-need for monitoring of the
9 dust plumes that are visible -- we had testimony
10 yesterday that suggested that the particles, that
11 a lot of the inorganic arsenic was exposed. We
12 even talked about particle sizing and different
13 particle sizes.

14 It was discussed and determined that the
15 inorganic arsenic could fly through the air or
16 flow through the air and not be seen. It was in
17 particle sizes not to be seen.

18 You testified about the need, there's no
19 need to have the monitoring onsite. And my
20 suggestion is is there -- or my question is how
21 would you measure particles that can't be seen for
22 the basis to draw your conclusion for your
23 argument that no monitoring is required at the
24 construction site?

25 A What I propose is to use the same

1 condition the staff had proposed, which I believe
2 is AQC-4, which I helped draft in another
3 proceeding, to establish performance criteria for
4 evaluating how effective the dust mitigation
5 measures are.

6 And I think the misconception that we're
7 dealing with here is that because PM10 particles,
8 an individual PM10 particle might be invisible,
9 that therefore a plume that contains PM10 is
10 invisible. And that's certainly not the case.

11 If you look, for example, at nitrogen
12 dioxide, which is a gas, certainly you can't see a
13 molecule of nitrogen dioxide. It's way too small.
14 And yet if you look up in the air on a summer
15 afternoon and you see a brown haze, it's nitrogen
16 dioxide.

17 That's that, quote, "invisible" unquote,
18 very small particle you're seeing, which, because
19 of the angle that you're looking at, because of
20 the concentration in the air, is suddenly visible.

21 And when we're talking about PM10 from
22 dust, we're not talking about a plume which is
23 just composed of 20 mcg, for example, of very
24 small PM10 particles with nothing else around it.
25 We're talking about a dust plume that's generated

1 that includes particles of all sizes.

2 And while the particles that are the
3 heaviest will tend to drop out from the plume most
4 quickly, the criteria that the staff has proposed
5 and that we've accepted of a plume of no more than
6 20 percent opacity for, I forget if it's 100 feet
7 or something like that, or 200 feet in length, I
8 think is an excellent indicator of the
9 effectiveness of the dust control measures.

10 And that you're not going to have high
11 levels of PM10 if you maintain your visible plumes
12 within those dimensions.

13 Q Then is it safe to say that an operator
14 of a piece of equipment would be within that 100
15 feet of the exposure to the plume?

16 A Usually the operator of the equipment is
17 going to be in front of the plume, with the plume
18 behind him or her.

19 Q Mr. Kramer asked you a question about
20 would the applicant agree -- and I'm going to
21 paraphrase this, so if I'm quoting wrong please
22 correct me, but will the applicant agree to limit
23 construction times consistent with the modeling.

24 And I don't think we got a direct
25 answer, or at least I didn't. Would you be

1 willing to -- can you refresh your memory on the
2 subject of what we were discussing there?

3 MR. HARRIS: I'm going to object as
4 being asked and answered.

5 HEARING OFFICER WILLIAMS: Overruled.

6 MR. FREITAS: Because I don't think an
7 answer was --

8 HEARING OFFICER WILLIAMS: He can answer
9 it if he knows.

10 MR. RUBENSTEIN: I believe what I said
11 was that no, I would not be comfortable accepting
12 that condition because it's not one that I've seen
13 imposed on any other proceeding. And because I
14 expect that there's going to be a comparable
15 condition limiting hours of construction related
16 to noise impacts.

17 And that we try to make sure that our
18 modeling assumptions are consistent with the
19 assumptions that are used in the noise section.

20 BY MR. FREITAS:

21 Q Why would you and the applicant take
22 issue with conditions that are unique and site-
23 specific regarding the mitigation of dust?

24 A Because I don't think there's anything
25 unique or site-specific about the construction of

1 a power plant at this site. I think it's quite
2 routine; and I think that there's no indication
3 that mitigation measures the staff has imposed in
4 a number of other projects throughout the Central
5 Valley, as well as around the state, are in any
6 way inadequate.

7 I'm not aware of any complaints about
8 dust levels at other project sites that haven't
9 been able to be addressed, if there are any
10 complaints that haven't been able to be addressed
11 within the confines of the mitigation measures the
12 staff has proposed elsewhere.

13 Q And those comparative sites are all same
14 geology, same soil types, same proximity to the
15 city, population bases and all the criteria are
16 basically the same or equal?

17 A They're widely varying. Some have homes
18 that are closer to the project site than is true
19 in this case. Some are further away. Some are in
20 the Central Valley with similar types of soil and
21 climate conditions. Some are in locations where
22 the conditions might be worse. Some might be
23 better. It's a real mix.

24 Q You stated that the District doesn't
25 have -- well, actually you stated that the

1 District and other agencies -- I can't find my
2 notes right now on it, but I believe you stated
3 that the District and other agencies don't have
4 requirements, existing requirements or regulations
5 in place for certain conditions that are -- I
6 guess I'm going to have to look for it now.

7 A Sorry, that's not ringing a bell.

8 Q I thought you said that the air quality,
9 the Air Pollution Control Board didn't have --

10 A Are you still talking about dust issues,
11 Mr. Freitas?

12 Q Yes. I think you said something about
13 regulations, there was no regulations --

14 A I said that some air districts do not
15 have dust control regulations that are as
16 comprehensive and as stringent as those that the
17 San Joaquin District has.

18 Is that what you were thinking of?

19 Q Okay, but you weren't referring to the
20 San Joaquin District doesn't have current
21 regulations regarding your emissions?

22 A No.

23 Q Or your certificates?

24 A No, I was not saying that at all.

25 Q In your own personal opinion, since

1 you're an expert I think you can give us your
2 opinion on this, do you think that the applicant
3 should or should not be required to do site
4 monitoring?

5 A Are you referring to the dust monitoring
6 condition AQC-5?

7 Q Yes.

8 A I do not think they should be required
9 to do that.

10 MR. FREITAS: That's all I have.

11 HEARING OFFICER WILLIAMS: Thank you,
12 Mr. Freitas. Applicant, do you have any redirect?

13 MR. HARRIS: Very limited. One line of
14 questioning.

15 REDIRECT EXAMINATION

16 BY MR. HARRIS:

17 Q Mr. Rubenstein, I want to talk about
18 what the Clean Air Act provides in terms of
19 sanctions for not having an approved plan.

20 Can you tell me briefly under section
21 179 of the Clean Air Act what sanctions are
22 available?

23 A Under the Clean Air Act and EPA's
24 implementing regulations, if the state or the
25 local district does not have an approved

1 attainment plan there are two sanctions that are
2 set out.

3 The first is the imposition of higher
4 emission offset ratios that would be applied to
5 stationary sources like this project, during
6 licensing proceedings.

7 And the second sanction that would take
8 effect would be reductions or elimination of
9 funding for various federal projects such as
10 construction of new highways.

11 The EPA regulations implement those
12 sanctions in sequence. We discussed earlier today
13 during my testimony a sanctions clock at the end
14 of an 18-month period, or in some cases a shorter
15 period, the offset sanction would go into effect.
16 And if the deficiencies were not corrected or the
17 revised plan not submitted, then the highway
18 funding sanctions would then go into effect.

19 Q So those two sanctions, the offsets and
20 the highway funds are the only two sanctions
21 available, is that correct?

22 A For failure to have an approved
23 attainment plan, yes.

24 Q So there are no sanctions, for example,
25 that would restrict or limit the use of pre-1990

1 credits, is that correct?

2 A That's correct.

3 Q And no sanctions that would limit or
4 restrict the use of pre-1993 credits, is that
5 correct?

6 A That's correct.

7 Q And no sanctions that would limit or
8 restrict the use of shutdown credits, is that
9 correct?

10 A That's correct.

11 MR. HARRIS: I have no further redirect.

12 HEARING OFFICER WILLIAMS: Thank you.

13 Anything further, staff?

14 MR. KRAMER: Yes.

15 RECROSS-EXAMINATION

16 BY MR. KRAMER:

17 Q You referred to a situation where you
18 discovered that a credit had been used for two
19 separate projects, correct?

20 MR. HARRIS: I'm going to object on the
21 basis it's beyond the scope of the redirect.

22 HEARING OFFICER WILLIAMS: Sustained.

23 MR. KRAMER: I'm sorry, he mentioned it
24 in his testimony in response to Mr. Freitas.

25 HEARING OFFICER WILLIAMS: Well, we're

1 not going to give you an opportunity to go back
2 based upon Mr. --

3 MR. KRAMER: But he didn't -- I just
4 simply want --

5 HEARING OFFICER WILLIAMS: You can cover
6 it with your witnesses.

7 MR. KRAMER: Okay. We will.

8 HEARING OFFICER WILLIAMS: Anything
9 further?

10 MR. KRAMER: Do I understand that I'm
11 limited to following up questions that were --

12 HEARING OFFICER WILLIAMS: That's
13 correct.

14 MR. KRAMER: -- that were asked by the
15 others?

16 HEARING OFFICER WILLIAMS: That's
17 correct.

18 MR. KRAMER: Then --

19 MR. HARRIS: You're limited to the scope
20 of my redirect with recross.

21 MR. KRAMER: Well, I would also include
22 Mr. Freitas' --

23 HEARING OFFICER WILLIAMS: I'm not going
24 to allow you to ask questions based upon evidence
25 that came out with Mr. Freitas. Now you're free

1 to present that in your own case and deal with it
2 in your own case, but --

3 MR. KRAMER: Okay, and we will. That's
4 not a big handicap.

5 HEARING OFFICER WILLIAMS: Okay. Mr.
6 Freitas, do you have anything further?

7 MR. FREITAS: Yeah, I don't understand
8 why you're doing that. Could you explain that,
9 the procedural process that gives you the grounds
10 to do that, or the basis to do that?

11 ASSOCIATE MEMBER GEESMAN: Let me break
12 in here.

13 MR. FREITAS: Okay.

14 ASSOCIATE MEMBER GEESMAN: In order to
15 conduct an orderly process after the cross is
16 conducted, the applicant is given the opportunity
17 to ask any redirect. Recross is then limited to
18 the scope of that redirect. It simply keeps the
19 record moving along and allows us to get through
20 all of the witnesses while we're still awake.

21 HEARING OFFICER WILLIAMS: I mean if we
22 didn't do this, this would go on forever. So,
23 we're going to -- if there's something --

24 MR. FREITAS: I want to remind the
25 record that we started two hours late today in

1 this process.

2 ASSOCIATE MEMBER GEESMAN: And I've
3 already offered --

4 HEARING OFFICER WILLIAMS: Yeah, we've
5 dealt with that.

6 ASSOCIATE MEMBER GEESMAN: -- apologies
7 for that.

8 MR. FREITAS: I don't want to be
9 handicapped because we started two hours late
10 because --

11 HEARING OFFICER WILLIAMS: Mr.
12 Freitas, --

13 ASSOCIATE MEMBER GEESMAN: You're not
14 going to be --

15 HEARING OFFICER WILLIAMS: -- Mr.
16 Freitas, you have not been handicapped. I mean --

17 MR. FREITAS: Okay, can I ask a
18 redirect, then?

19 ASSOCIATE MEMBER GEESMAN: Recross is
20 what it's called.

21 MR. FREITAS: Recross.

22 HEARING OFFICER WILLIAMS: Recross, yes.

23 ASSOCIATE MEMBER GEESMAN: But it will
24 be limited to the scope of the redirect.

25 MR. FREITAS: Oh, it would be limited to

1 the scope. You've ruled.

2 ASSOCIATE MEMBER GEESMAN: Do you have
3 any questions on his redirect?

4 MR. FREITAS: You've ruled. No.

5 HEARING OFFICER WILLIAMS: Okay. Staff,
6 are you prepared to present your case?

7 MR. HARRIS: Mr. Williams, can we move
8 our documents into evidence?

9 HEARING OFFICER WILLIAMS: Yeah, we'll
10 move 4A -- we'll accept 4A.52 and we'll admit
11 4A.52 and 4A.53. Those are the only two --

12 MR. HARRIS: All of the 4As if we can.

13 HEARING OFFICER WILLIAMS: Oh, why don't
14 you move those.

15 MR. HARRIS: I move all of 4A-1 through
16 4A-53.

17 HEARING OFFICER WILLIAMS: Okay, those
18 will be admitted.

19 Staff, are you ready to go?

20 MR. KRAMER: I'm wondering, in the
21 interest of fairness to some of the other agencies
22 that have come, if we shouldn't, for instance, put
23 the Air District on. Maybe give Mr. Warner a
24 chance to leave a little bit earlier than the rest
25 of us.

1 HEARING OFFICER WILLIAMS: Certainly.

2 Mr. Warner -- where are we going to seat him,
3 first of all?

4 MR. TRASK: He can have my seat.

5 HEARING OFFICER WILLIAMS: Okay.

6 MR. HARRIS: Well, may I ask a question.
7 Is that actually the best way to proceed, given --

8 HEARING OFFICER WILLIAMS: I don't think
9 it hurts. Let's go off the record.

10 (Off the record.)

11 HEARING OFFICER WILLIAMS: Back on the
12 record.

13 MR. KRAMER: We have three witnesses to
14 be sworn.

15 HEARING OFFICER WILLIAMS: Okay. Madam
16 Court Reporter, could you swear the witnesses for
17 us.

18 Whereupon,

19 ALVIN GREENBERG, MATT HABER and WILLIAM WALTERS
20 were called as witnesses herein, and after first
21 having been duly sworn, were examined and
22 testified as follows:

23 MR. KRAMER: We will largely go through
24 these witnesses initially one after another.

25 //

1 DIRECT EXAMINATION

2 BY MR. KRAMER:

3 Q But for the record, could you identify
4 yourselves, starting with Dr. Greenberg. State
5 your full name and then spell your last name.

6 DR. GREENBERG: Alvin Greenberg; I'm a
7 consultant to the California Energy Commission. I
8 sponsored the testimony on hazardous materials and
9 worker safety, fire protection, waste management
10 and public health.

11 MR. HABER: I'm Matt Haber, H-a-b-e-r;
12 I'm Senior Energy Advisor for USEPA Region IX.

13 MR. WALTERS: I'm William Walters, a
14 consultant with the California Energy Commission.
15 I sponsored the air quality testimony and the
16 visual plume modeling analysis.

17 MR. KRAMER: And with the exception of
18 Mr. Haber, Dr. Greenberg and Mr. Walters, your
19 qualifications have been filed with the staff
20 assessment in this proceeding, correct?

21 DR. GREENBERG: Correct.

22 MR. WALTERS: Correct.

23 DR. GREENBERG: And I also testified to
24 that yesterday.

25 MR. KRAMER: That's true.

1 DR. GREENBERG: Don't make me go through
2 that again.

3 (Laughter.)

4 MR. KRAMER: Mr. Freitas can do it.

5 MR. FREITAS: Are you making a
6 reference?

7 (Laughter.)

8 MR. KRAMER: Okay, we're going to begin
9 with Mr. Haber. And I believe, Mr. Haber, you had
10 a prepared statement that you wanted to make on
11 behalf of the EPA?

12 MR. HABER: Yes, that's correct. It
13 starts out good morning, but there's something
14 wrong with that.

15 (Laughter.)

16 MR. HABER: First I'd like to thank the
17 Commission Staff for inviting me to this
18 proceeding, and the Commissioners for their
19 attention to this complex and important matter,
20 improving air quality in the San Joaquin Valley is
21 vitally important to EPA.

22 We're actually investing at least as
23 much in the San Joaquin Valley right now as we are
24 in the Los Angeles area, which is reputed to have
25 the worst air quality in the nation.

1 Second, I want to emphasize that the
2 issues I'll be discussing have nothing to do with
3 the cleanliness of the proposed Calpine power
4 plant, per se. This plant would be as clean as
5 other plants currently in the permitting process,
6 which is to say cleaner than power plants that
7 recently proceeded them in the permitting process.
8 And among the cleanest fossil fuel and power
9 plants in the world.

10 Rather the issue has to do with the
11 emission offsets proposed by Calpine, and
12 apparently accepted by the San Joaquin Valley
13 District in its final determination of compliance.

14 The bulk of the NOx offsets proposed for
15 use for this plant are from the control of
16 internal combustion engines that occurred roughly
17 between 1987 and 1989. These reductions occurred
18 before the 1990 Clean Air Act amendments, and
19 before the emissions inventory used to create the
20 1994 attainment plan.

21 What does that mean? In short, the
22 emissions inventory in those years did not include
23 the emissions represented by the credits. The
24 logical consequence is that the attainment plan
25 assumed that these emissions were not and would

1 not be in the air.

2 The simple result is that these
3 emissions are not surplus to Clean Air Act
4 requirements, and do not meet one of the four key
5 Clean Air Act requirements for offsets.

6 Normally such a defect would be a fatal
7 flaw and would not allow for the use of these
8 credits at all. That was EPA's position at the
9 time the District proposed its determination of
10 compliance, and EPA so informed the District. In
11 fact, that was also EPA's position on the Pastoria
12 project, as well as a host of other projects
13 proposing to use the pre-90 ERCs.

14 However, as you heard earlier, last week
15 EPA proposed to approve San Joaquin Valley's new
16 source review rule. And as part of that proposal,
17 to incorporate a tracking system to deal with the
18 problem of nonsurplus credits by allowing the
19 District to show that it requires enough surplus
20 credits on an annual aggregate basis to meet
21 federal requirements for major sources and major
22 modifications.

23 This system would allow the use of
24 Calpine's pre-1990 credits and any other
25 nonsurplus credits that the District chooses to

1 issue permits for.

2 There are, however, some risks I wanted
3 to flag for everybody here. EPA has, to date,
4 proposed, but not yet finalized, the new source
5 review rule. EPA's intent is to finalize the
6 rule, including the tracking system, taking into
7 account any comments we receive.

8 It is possible, however, although very
9 unlikely, that we will receive comments on this or
10 another aspect of our proposal that would cause us
11 to rethink our direction.

12 It's also possible that too many
13 nonsurplus credits would be used in any one year.
14 For example, unless San Joaquin Valley District
15 withdraws its approval of this project, Calpine's
16 NOx credits would need to be entered into the
17 tracking system with a zero value. This
18 immediately creates the need for 300-some tons of
19 surplus credits in the tracking system, a
20 substantial amount.

21 If too many nonsurplus credits were to
22 be used in one year projects with permits would
23 not be jeopardized for that reason. Rather, under
24 the proposed rule, the District would be obligated
25 to make up the shortfall for, by example, retiring

1 other surplus credits.

2 In the worst case the District would
3 default to federal requirements, issuing permits
4 only to those with surplus credits, at least until
5 the shortfall was remedied.

6 Thus, we think the District rules allow
7 Calpine to rely on nonsurplus credits, and we're
8 comfortable allowing the permit to move forward.

9 If there is a shortfall, the District
10 may need to reconsider the permit, or it will need
11 to insure that new permits do not rely on these
12 types of nonsurplus credits in the future.

13 Lastly, I just want to address our
14 request of the Energy Commission, and emphasize
15 that the dispute that I referred to earlier in my
16 comments is between us and the District. We're
17 not asking the Energy Commission to adjudicate
18 that dispute. The Energy Commission doesn't have
19 that authority, we're not asking them to do that.

20 Rather, what we're hoping to do is
21 reduce the risk that Calpine or other applicants
22 will be exposed to, citizen or EPA enforcement
23 action after construction has begun, which is an
24 outcome that we prefer not to happen.

25 Thank you.

1 MR. KRAMER: Question for you. The
2 shortfall you described in the tracking system, if
3 one were to be created, you suggested that could
4 be made up by taking -- I'm not clear, but it
5 sounded that you were describing a process where
6 other credits that were in the system and not
7 currently used, but were just in the bank, could
8 be reduced to create a surplus that could then be
9 used to make up the shortfall? Is that -- do I
10 understand that that's what you were telling us?

11 MR. HABER: Right. There are a number
12 of mechanisms the District could use to make up
13 for any shortfall. But sort of fundamentally
14 starting out, the District believes, and we agree,
15 that some of its requirements go beyond the
16 minimum federal requirements. Such as the fact
17 that more sources are required to provide offsets,
18 and in some circumstances more offsets are
19 required of a source that we would both require
20 offsets of, but the District would require greater
21 amount.

22 And that should, under the scheme,
23 prevent a shortfall from occurring. But if a
24 shortfall were to occur the District could go
25 back, for example, and take a cut off of all of

1 the current surplus credits and use those to fund
2 the shortfall. Or the District could pass a rule
3 exclusively to create reductions to make up for
4 the shortfall.

5 And there are conceivably other
6 mechanisms the District could use.

7 MR. KRAMER: But that one option of
8 getting it from the existing surplus credits
9 would, in effect, be a tax on them, wouldn't it?

10 MR. HABER: In effect, that's right.

11 MR. KRAMER: They would end up with less
12 credits than they started with?

13 MR. HABER: Right.

14 MR. KRAMER: Mr. Rubenstein this morning
15 characterized the differences between the District
16 and EPA as a planning exercise or an accounting
17 issue. Do you agree with that characterization?

18 MR. HABER: Well, it fundamentally is an
19 accounting issue because to determine whether
20 credits are surplus is, at its base, an accounting
21 exercise.

22 But the choices the District makes in
23 creating its plan have necessarily an impact on
24 what credits may be surplus. And therefore, what
25 credits may be issued or not issued.

1 So the choices that the District made in
2 creating its 1994 plan by not including credits
3 that existed before 1990 have the effect of making
4 those credits nonsurplus. And until this tracking
5 system is in place, not usable.

6 MR. KRAMER: But it has some real world
7 consequences, correct?

8 MR. HABER: As I described.

9 MR. KRAMER: The Federal Register notice
10 proposing to approve the District's revised NSR
11 rules, I've lost track of -- Mr. Williams, I gave
12 you my original upon which I wrote the exhibit
13 number.

14 HEARING OFFICER WILLIAMS: It's --

15 MR. HARRIS: 4A.53.

16 MR. KRAMER: 4A.53?

17 HEARING OFFICER WILLIAMS: Right.

18 MR. KRAMER: Thank you. On page 73-31
19 of that document it describes the history of the
20 District's NSR supervisions. Have you reviewed
21 that background summary? It's section 2A.

22 MR. HABER: I haven't looked it up but
23 I'm personally familiar with most of it, so I
24 probably could relate to it.

25 MR. KRAMER: Well, I was going to ask

1 you if the information in here is true to your
2 knowledge?

3 MR. HABER: Well, at least true because
4 I know the people who wrote it, did the research
5 to make sure that it was true.

6 MR. KRAMER: Okay, and at present does
7 the District have an approved attainment plan for
8 any pollutant?

9 MR. HABER: Well, I echo Mr.
10 Rubenstein's response as far as CO, either an
11 improved attainment or maintenance plan.

12 The District does not have any approved
13 plan at all for PM10. In terms of ozone, the
14 District has an approved plan via the 1994 plan.
15 But needs, but lacks, an area plan that was due
16 when it failed to make attainment by the serious
17 area date.

18 MR. KRAMER: So the 1994 approved plan
19 is out of date, is that --

20 MR. HABER: It's out of date --

21 MR. KRAMER: What is EPA's position on
22 the need to identify specifically offsets that are
23 to be used for a particular project, and what must
24 happen before those offsets can be changed in some
25 way?

1 MR. HABER: Generally speaking EPA's
2 view is that when a project is permitted the
3 offsets must be identified and enforceable. And
4 by the time operation begins offsets must be
5 achieved. And that is, in some ways, a departure
6 from California's approach, which is to say the
7 offsets have to be achieved before a certificate
8 is issued.

9 If the project were to want to change
10 its mix of offsets, our view is that needs to go
11 through a subsequent public process of some sort
12 at the District level.

13 MR. KRAMER: And what's the goal of
14 having the public process? What are you trying to
15 achieve there?

16 MR. HABER: Well, too, in presenting --
17 and this is true for most districts, the banking
18 rule, itself, is not part of the SIP, so any
19 public process associated with that doesn't have
20 the gloss of federal approval.

21 And the second, and probably more
22 important from a practical, real world standpoint,
23 is that as we've been hearing for much of the day,
24 there are often disputes between EPA and the
25 district, or EPA and the applicant as to the

1 validity of credits.

2 And going through a public process
3 before the credits are used is really the best
4 time from a public policy standpoint to deal with
5 any disagreements, because at that time the
6 project hasn't been constructed, and any defects
7 can be corrected before significant investment has
8 occurred.

9 MR. KRAMER: So does EPA support the
10 staff's proposed condition AQC-7, which would
11 require that the specific offsets be listed in the
12 condition, itself? And that any change to those
13 offsets be approved by the Commission prior to the
14 change taking effect?

15 MR. HABER: I guess I'd say support it
16 as a stand-in for similar action on the District's
17 part, since our formal legal obligation in
18 interactions with the District, we would prefer to
19 see a similar condition in the District's FDOC.

20 But barring that, we think it certainly
21 makes sense in the District's -- or the
22 Commission's approval.

23 MR. KRAMER: Thank you. No further
24 questions at this time.

25 Would you prefer that we talk to each of

1 the witnesses before we go to cross-examination?

2 HEARING OFFICER WILLIAMS: Let's go off
3 the record.

4 (Off the record.)

5 MR. KRAMER: Okay, next, Mr. Walters.

6 Mr. Walters, did you prepare the air
7 quality staff assessment and -- actually, before I
8 do that, in this case we completely reprinted the
9 air quality section in the addendum. So we'd like
10 to offer the air quality portion of the addendum
11 into evidence. That's already marked as staff's
12 2, I believe.

13 HEARING OFFICER WILLIAMS: Right.

14 MR. KRAMER: Mr. Walters, did you
15 prepare the air quality section of the addendum?

16 MR. WALTERS: Yes, I did.

17 MR. KRAMER: And does that section
18 represent your analysis and opinions and
19 conclusions regarding this project, the air
20 quality aspects of this project?

21 MR. WALTERS: Yes, it does.

22 MR. KRAMER: Could you summarize the
23 section for the benefit of the Committee?

24 MR. WALTERS: Certainly. As staff, we
25 review all of the information that comes in from

1 the applicant in terms of their proposal. All the
2 information that comes in from the District, in
3 terms of their PDOC and FDOC. Information that
4 comes in from other third parties, like USEPA.
5 And we perform a third-party analysis of the
6 project.

7 This third-party analysis goes through a
8 number of features and a number of other areas
9 that we analyze. We analyze the local area and
10 the local setting. The local area and setting in
11 this particular context is in the San Joaquin
12 Valley air basin, which is a severe nonattainment
13 area for ozone. And a serious nonattainment area
14 for PM10.

15 Those are the two key criteria in terms
16 of evaluating this project, in terms of the
17 general siting of the project.

18 In terms of the specific siting of the
19 project, some of the things we evaluated were the
20 specific location in relation to receptors; and
21 the specific meteorology expected in this
22 particular location and its effect on the specific
23 local residents.

24 One of the items that the applicant
25 presented that I would like to present in a little

1 more detail is the PM10 monitoring essentially
2 giving the full level of detail available from the
3 screen shot that he provided in a small table,
4 just to give you background of what's going on in
5 the --

6 MR. KRAMER: Before you go on, this --

7 (Pause.)

8 MR. KRAMER: I'm informed we're up to Q,
9 as in queen.

10 HEARING OFFICER WILLIAMS: Okay.

11 MR. HARRIS: Mr. Williams, a question.
12 I don't recognize this as being part of the
13 prefiled testimony. Was this part of the prefiled
14 testimony?

15 MR. KRAMER: No, I think, as he
16 indicated, this is simply I guess a larger version
17 of something that was in --

18 MR. WALTERS: Mr. Rubenstein's
19 testimony.

20 MR. HARRIS: I'm confused. This is from
21 our testimony?

22 MR. WALTERS: Mr. Rubenstein had put in
23 selected years of this specific data.

24 MR. KRAMER: Okay, so this is an
25 expansion of it.

1 MR. HARRIS: Well, it's been numbered
2 and identified. I'll reserve the right to object
3 to its entry until we have a chance to -- we can
4 decide that later. I just wanted to note my
5 concern.

6 HEARING OFFICER WILLIAMS: We've marked
7 it for identification. Staff's 2Q. Q, as in
8 Quebec.

9 Go ahead, Mr. Kramer.

10 MR. KRAMER: Mr. Walters was in the
11 middle of summarizing his staff assessment
12 testimony.

13 MR. WALTERS: In our review of the data
14 one of the things we review, you know, is
15 essentially the trends that are happening.

16 The applicant provided some trend data
17 based on just a few limited years, and I wanted to
18 provide the Commission a little more data from
19 that same data source.

20 And I think you can see that if you take
21 a look at the various numbers, whether it's the
22 number of state exceedances, the number of
23 national exceedances, the annual averages,
24 geometric or arithmetic, or the maximum
25 observations or the expected maximums that are the

1 EPDC values, that really the levels have really
2 remained almost static since 1994. There's been
3 very -- or 1993. There's been very little
4 improvement.

5 There has been a very slight gradual
6 improvement, but very slight in that essentially
7 eight-year, nine-year period.

8 So in characterizing the improvements in
9 PM10, I just wanted to note where things are.
10 They're still considerably above the state
11 standard. They're still above the federal
12 standards. And the movement towards the standards
13 is very slow.

14 Beyond going through the setting for the
15 site, then we identify, I'll go through the
16 applicant's estimate in emissions. Determine, you
17 know, any issues we have with those. Go through
18 various sets of data requests and data responses.
19 And come up with our final findings and what we
20 consider to be the emissions. Along with what the
21 District has assumed, which for the operation of
22 the plant, are all consistent.

23 We're the only one doing an analysis of
24 the construction of the plant. The District does
25 not do an analysis of the construction emissions

1 or construction impacts.

2 One of the issues that came up in this
3 particular project was the revision to the
4 construction impact, and revision to the emission
5 numbers that were provided by the applicant.

6 And one of the things that I wanted to
7 note in that particular aspect is that we asked
8 the data request back in January of 2002
9 specifically addressing whether or not -- well,
10 specifically addressing that we had issues with
11 the PM10 concentrations. We thought they were
12 potentially significant.

13 And we asked the applicant if they would
14 like to revise any emission estimates or any
15 modeling they performed. Their answer at the time
16 was no, everything is fine. Our emission
17 estimates are good, and our modeling is good.

18 Essentially between that time and the
19 time we put the staff assessment out, which was
20 approximately six months later, I believe, we
21 heard nothing from the applicant. The first time
22 we heard anything in terms of revised construction
23 estimate was after we published, and after
24 basically they found out they had conditions that
25 they didn't like.

1 So after we got the revised construction
2 emission analysis and modeling analysis we went
3 through it and made a determination on whether or
4 not we considered it, the revised analysis, to be
5 reasonable. Reasonable in several aspects. Is it
6 reasonable in terms of the emission calculations.
7 Is the remodeling that was done reasonable. And
8 what other issues did we have with those results.

9 And we had a number of findings. We
10 essentially just identified in the addendum that
11 we did not consider, for the most part, that those
12 new numbers were reasonable. And so we used the
13 initial numbers that were provided, and were
14 initially identified. And for six months
15 considered good through that data response. And
16 up until we published the staff assessment.

17 Some of the issues that we had in terms
18 of the revised analysis were there were a number
19 of changes that were provided in the analysis.
20 They changed the number of equipment; they changed
21 the number of hours per day, as well as for the
22 number of equipment. They changed the fugitive
23 dust control efficiency. They changes the PM10
24 exhaust factor for diesel engines.

25 None of those were explained in any sort

1 of detail to give us any rationale for why this
2 new estimate was better than the old estimate. It
3 was just assumed that we would, I guess, accept
4 it.

5 In terms of what that meant to the
6 estimate is a rather significant reduction,
7 particularly in the PM10 numbers that were
8 estimated. In terms of the actual calculations,
9 themselves, part of the problems we had were some
10 inconsistent use of the control efficiency. The
11 control efficiency calculation they used is
12 specifically for unpaved road travel. That
13 control efficiency was then used for other dust-
14 creating activities that were not unpaved road
15 travel.

16 Beyond that, the assumptions used for
17 determining the 88 percent control efficiency
18 really can't be supported. Number one, the
19 evaporation rate they used in the calculations,
20 one of the parameters of the calculation was
21 identified as 65 inches per year. The figure they
22 cited clearly shows an evaporation rate in this
23 area is 90 inches per year, which would affect the
24 result of the calculation and lower the number.

25 Number two, they assumed, with this

1 assumption of assuming this 88 percent control
2 efficiency for essentially almost all the
3 operations including the wind-blown dust, that
4 would essentially give the assumption that what
5 they were doing for this control efficiency and
6 the other factors that go into it, which are they
7 water four times per hour at .7 liters per square
8 meter. That they would have to do that over the
9 entire active surface area of the site in order
10 for that control efficiency to make any sense for
11 all the different activities that were going on.

12 Well, if you do a calculation that means
13 500,000 gallons of water would be applied to the
14 site every day. Now one of the assumptions that
15 the applicant had was one water truck, one 8000
16 gallon water truck. And I just don't see how one
17 8000 gallon water truck can throw out 500,000
18 gallons per day. Essentially it's 70 loads per
19 day, you know, essentially every 15 minutes, about
20 20 acres are getting covered with water.

21 So the inappropriateness of the fugitive
22 dust control factor being applied to all the
23 various sources was one of the problems we had.

24 The --

25 MR. HARRIS: Can I ask where this is in

1 the prefiled testimony? I'm looking for
2 discussions about, you know, 500,000 gallons per
3 day and one 8000 -- I don't see any of this in the
4 prefiled testimony.

5 MR. KRAMER: I don't believe it is.
6 This is, in part, rebuttal. I think maybe Mr.
7 Harris may make a point that this is not -- he's
8 going beyond now, talking about the staff
9 assessment. And maybe you should --

10 MR. HARRIS: I think that's precisely my
11 point. That we --

12 MR. KRAMER: However, we will get to
13 this stuff. If you want to argue it now, maybe we
14 should.

15 MR. HARRIS: No, I do want to argue it
16 now, because none of this is in the prefiled
17 testimony, and my witnesses have no ability to
18 check any of this testimony. We haven't seen it
19 before.

20 MR. KRAMER: Well, we had basically one
21 week to digest their prefiled testimony filed on
22 February 4th; attempt to file something by the
23 11th. I believe --

24 MR. HARRIS: If you failed to do so,
25 that's to your disadvantage.

1 MR. KRAMER: Well, no, that was an
2 unreasonable --

3 MR. HARRIS: It was the Committee order
4 from our prehearing conference down here. We went
5 out of our way to set dates for our filing on the
6 4th, to ask for your filing on the 11th, so that
7 we wouldn't have this kind of surprise.

8 MR. KRAMER: Well, this is in the matter
9 of rebuttal. Again, today in his oral testimony,
10 Mr. -- he has attacked staff's refusal to accept
11 various models or assumptions -- various
12 calculations that they've submitted.

13 What Mr. Walters is attempting to do
14 right now is explain why he is unable to accept
15 those. I think he's entitled to do that.

16 MR. HARRIS: That information was
17 presented in our prefiled testimony on February
18 4th.

19 MR. KRAMER: But it took, as I
20 understand --

21 MR. HARRIS: And so --

22 MR. KRAMER: -- it, it took him more
23 than a week to dig up some of the references that
24 were in that testimony. It's just impossible --

25 MR. HARRIS: We heard nothing about a

1 request for additional time. And, again, we were
2 very clear at the prehearing conference to set
3 dates, quite frankly because we've been surprised
4 in the last three cases I've been involved in
5 personally with items coming in the day of the
6 hearing that are substantive new testimony.

7 MR. KRAMER: Well, I consider the
8 filing, the massive filings that we received in
9 the last month to be on that same level.

10 MR. HARRIS: The which filings?

11 MR. KRAMER: Well, there was quite a bit
12 of paperwork suggesting changes to various
13 conditions; that takes quite awhile to process.

14 MR. HARRIS: And it was gratuitous and
15 you could have ignored it, too. It was an attempt
16 to work through those issues.

17 MR. KRAMER: And we attempted to.

18 MR. HARRIS: Let me distinguish between
19 new information and new conditions --

20 HEARING OFFICER WILLIAMS: Well, let me
21 say -- just let me say this. Just let me get --
22 let's go off the record.

23 (Off the record.)

24 MR. WALTERS: I can continue along the
25 same line?

1 HEARING OFFICER WILLIAMS: Yes, yes.

2 MR. WALTERS: Some of the other issues
3 that we --

4 HEARING OFFICER WILLIAMS: Let me -- you
5 are reading from a document. Is that new? Is
6 that the new material that you're --

7 MR. WALTERS: I'm skimming over stuff
8 I've written down.

9 MR. KRAMER: Those are his notes.

10 HEARING OFFICER WILLIAMS: Personal
11 notes?

12 MR. KRAMER: Right.

13 HEARING OFFICER WILLIAMS: Okay.

14 MR. KRAMER: Preparatory notes. I presume
15 that they're looking at the same thing on their
16 laptops --

17 HEARING OFFICER WILLIAMS: Okay, okay,
18 I -- okay, go ahead, continue.

19 MR. WALTERS: Some of the other issues
20 we found with the construction emissions that we
21 considered potentially problematic was the
22 moisture content that was used in the equations
23 appear to be too high for a latent soil moisture
24 content in this particular valley.

25 I don't want to go into the specifics,

1 but that would also create a lower emission factor
2 for a number of the different fugitive dust
3 issues. And essentially already assumes a certain
4 amount of watering to get up to that level. And
5 would essentially double count lowering the
6 emissions based on watering.

7 Both, the use the efficiency of 88
8 percent and they use this higher moisture content
9 as the base for uncontrolled emission estimate.

10 Another issue we found was the average
11 wind speed data that they use doesn't appear to
12 match the meteorological files they gave us.

13 One of the other issues we found was the
14 equipment load factors that were used are
15 extremely low. Some of them are barely above idle
16 assumptions.

17 And taking all of these things into
18 account, but we didn't consider that the revised
19 emission calculations were conservative, or likely
20 to be conservative. And would likely under-
21 predict the emissions that could happen,
22 particularly in terms of a worst case day, a worst
23 case hour, and most likely an annual condition.

24 One of the other things we looked at is
25 we looked at the quantities of emissions assumed

1 at various different power plant sites and just
2 made a simple comparison. And this particular
3 power site came in lower than much smaller power
4 plant sites on brownfield sites that would have
5 very little earth-moving requirements, and would
6 be much smaller.

7 So that's another comparison we made to
8 make an identification whether or not we consider
9 this estimate reasonable, or the revised estimate
10 to be reasonable.

11 In doing that, in taking a look at some
12 of those other projects, one of the other things
13 we found is probably the most problematic issue we
14 came up with in our review is that we found that
15 essentially the same emission estimate was used in
16 three different projects of three different sizes,
17 both maximum daily and annual.

18 And we just didn't see those three
19 projects -- and I have copies of the other two
20 projects. One being a 250 megawatt project; the
21 other being a smaller project, a two-frame project
22 rather than a three-frame project, would have the
23 same emissions. It just doesn't make sense that
24 the same amount of horsepower would be required to
25 put together a considerably smaller project than

1 the San Joaquin project.

2 BY MR. KRAMER:

3 Q Could you just name those two other
4 projects?

5 A Those two other projects are the Inland
6 Empire Energy Center and the Walnut Energy Center.

7 Q And the Inland Empire Center, what is
8 its size relative to this project?

9 A It's a two 7F frame project, so it's
10 about two-thirds.

11 Q Of the rated output?

12 A The rated output and generally the size.

13 Q And the Walnut project, how does that
14 compare to this in size?

15 A It's a 250 megawatt project, two 7Es,
16 smaller turbines, much smaller cooling tower, much
17 smaller footprint. Also in an agricultural field,
18 so the assumption that it would have the same
19 annual emissions and the same maximum daily
20 emissions just didn't seem reasonable.

21 And in lieu of that, in our third-party
22 review of this analysis we didn't consider the new
23 numbers valid or supportable. And the applicant
24 did not provide a level of detail we considered
25 necessary to support all of the changes they put

1 in for this new analysis.

2 Therefore, we did not use these new
3 numbers in our -- instruments, or in our impact
4 analysis.

5 Q And these are construction emissions, is
6 that correct?

7 A Construction emissions. Now, getting
8 past the emissions and getting to the modeling,
9 one of the issues that the applicant put forth in
10 their testimony was a comparison of our modeling
11 results and their modeling results.

12 I think it's very important to note that
13 their comparison was an apples-and-oranges
14 comparison. They did not compare the same
15 modeling results in terms of the 7:00 a.m. to 5:00
16 p.m. results to each other.

17 They compared our 24-hour results to
18 their 7:00 a.m. to 5:00 p.m. results. And I think
19 it's very important to note that our 7:00 a.m. to
20 5:00 p.m. results were actually lower than their
21 modeling results for every pollutant except for
22 the one-hour NOx. And the only reason the one-
23 hour NOx was different is we performed a true NOx
24 OLM procedure, whereas the applicant performed a
25 nonregulatory NOx OLM technique that we didn't

1 consider valid enough to go forward with.

2 So their characterization of our
3 modeling results being higher than theirs, at
4 least for equivalent emissions, is completely in
5 error. Our modeling results actually show lower
6 numbers than theirs do for the same amount of
7 emissions.

8 Q Let me stop you. And again you're
9 talking about construction emissions?

10 A Yes, I'm talking about construction
11 emissions.

12 Q And --

13 A And I'm not going to provide my table
14 here, since that would be new evidence, even
15 though they provided their table in their numbers.

16 Q Are you -- is the staff recommending
17 the requiring of any offsets for construction
18 emissions?

19 A No, we're not.

20 Q So how is it that you're dealing with
21 the construction emissions, trying to mitigate
22 them?

23 A Well, basically what we're trying to do
24 is apply the maximum feasible mitigation that we
25 consider necessary to deal with the impacts. And

1 in dealing with those impacts I deal with the
2 criteria impacts, and then I take what Dr.
3 Greenberg says is necessary to deal with toxic air
4 contaminant impacts.

5 Q So that's reflected in which conditions
6 of approval?

7 A That is reflected basically in AQC-3 in
8 terms of the fugitive dust control requirements,
9 and specifically for air toxics in the requirement
10 for the soot filters, which was a recommendation
11 in the public health section.

12 Q Okay. Where does AQC-5 fit into that
13 mitigation strategy, if it does?

14 A Well, AQC-5 is essentially a
15 demonstration that the mitigation is actually
16 effective. And without that demonstration, you
17 know, it's basically just, the condition is just
18 paper.

19 The problem being that the CEC does not
20 have the manpower to be down here every day to
21 make sure that they're doing what they're supposed
22 to do. The District doesn't have the manpower to
23 be here every day to make sure they're meeting the
24 regulation 8 rules.

25 As a matter of fact I made a call to

1 another applicant who has three projects going on
2 in the District, one currently under construction
3 and two that have completed construction. He
4 indicated he never saw a District personnel there
5 once during the construction interval to do any
6 compliance on the regulation 8 rules.

7 So, basically regulation C(5) is there
8 for the protection of the community to make sure
9 that fugitive dust mitigation is actually being
10 applied, because we're not going to have eyes out
11 here every day to make sure it's happening. But
12 the data will show that the work is being done
13 properly in terms of mitigation.

14 Q What is the purpose of condition AQC-4?

15 A Well, AQC-4, which was used in another
16 project and I applied here, my purpose for putting
17 in AQC-4 is really for events, for maximum event,
18 and for nuisance conditions.

19 It is not meant to make any indication
20 that if you have a visual plume or don't have a
21 visual plume that you're health protected one way
22 or the other.

23 What it means is that if you have a
24 significant plume, a 20 percent plume, that's a
25 problem. That's a direct nuisance of any

1 interval. Not one hour, not daily impacts, but
2 that is a problem that is immediate.

3 And AQC-4 is specific in what it
4 requires in terms of where the impacts would have
5 to be, and is not an overall health protective
6 condition that AQC-3 and AQC-5 attempt to be.

7 Q So do you believe that AQC-4 can achieve
8 all of the benefits that you're trying to achieve
9 with AQC-5?

10 A No, I don't think it can at all.

11 Q Do you know what size particle, how big
12 a particle has to be in order to be visible?

13 A Not exactly. But I can make a
14 generalization that when the PM10 ambient air
15 quality is at 150 mcg/cubic meter you still can't
16 see it. You may notice a haze over a very long
17 distance, but from one end of the project site to
18 another, you wouldn't be able to see it.

19 Part of the problem in dealing with
20 these plumes in a construction site, particularly
21 on the onsite construction, is that there are
22 going to be a number of areas where you're
23 creating dust. You're going to have different
24 scrapers working at different places. You're
25 going to have bulldozers working at other places.

1 You're going to have a piece of equipment driving
2 on unpaved roads.

3 And it's an additive effect of all of
4 those things that creates a problem, not just one
5 plume that may or may not be visible.

6 Q And one water truck just racing around
7 between them, I guess?

8 A If you use --

9 MR. KRAMER: That's a joke. I withdraw
10 the joke. Unfortunately I derailed my train of
11 thought.

12 MR. WALTERS: That's okay, I'll just
13 continue on in terms of what our analysis dealt
14 with.

15 BY MR. KRAMER:

16 Q Okay.

17 A Essentially that completes what we did
18 in terms of the initial emission estimate and
19 impact analysis for construction in terms of the
20 numeric analysis.

21 We also took a look at the emissions
22 from the project operation and the modeling
23 results from the project operation. We didn't see
24 any major problems with the results of any of
25 either the District's analysis or the applicant's

1 analysis in terms of the emissions or see any
2 localized significant impacts from the
3 construction.

4 We also agree with the general level of
5 offsets being proposed, but we do have issues with
6 the specific offset package that's being proposed
7 for the project. And we would like additional SO2
8 offsets to be proposed for the project to deal
9 with secondary PM10 formation of the project.

10 Q Now let me ask you about the offset
11 package concerns, then. Is there more than one
12 type of concern?

13 A Essentially there are three main
14 concerns. The first concern is the pre-1990
15 concern. Obviously there have been developments
16 that are so new that we haven't even had a chance
17 to evaluate all of them.

18 But, you know, there is the potential
19 that that issue, may from a general regulatory
20 standpoint, go away if EPA says that the pre-1990s
21 are okay with all these other things that have to
22 happen.

23 But, at the same time, staff does have
24 some issues or general problems with allowing
25 something like that that requires future

1 compliance in things that haven't even been done
2 before.

3 The tracking system is completely new;
4 it's completely unproven. So, we would just like
5 to at least, even if on the face of it in the long
6 run we decide to accept the 1990s, that we
7 identify the risk that we think is still inherent
8 in the use of the pre-1990 credits.

9 Q Okay, --

10 A The second type, the second problem we
11 identified is the major source shutdown credits.
12 And in trying to deal with this particular issue
13 we did, in fact, discuss this issue with EPA. And
14 to get their basic feel on this particular issue.
15 And only presented these based on our discussions
16 with EPA that they thought that our rationale was
17 logical.

18 That the District rule, itself, says if
19 you don't have an approved attainment plan, which
20 I think we've heard enough testimony that the
21 District does not have approved attainment plans
22 for PM10 or ozone, the District rules state you
23 cannot use major source shutdowns, or a shutdown
24 at a major source for use as an offset for any
25 major source.

1 MR. FREITAS: I'm sorry, excuse me.

2 What was that rule, the name of that rule again?

3 MR. WALTERS: The rule is District rule
4 2201. And the specific placement rule is 4.13.1
5 or -1.

6 MR. FREITAS: Thank you.

7 MR. WALTERS: And in looking at that
8 further, we looked at another memorandum that was
9 provided by EPA back in '93 in terms of
10 determination of the use of shutdown. In fact,
11 the subject of the memorandum is use of shutdown
12 credits for offsets.

13 And we based our findings essentially on
14 that particular memorandum, which notes that prior
15 shutdown credits can't be used without an improved
16 plan.

17 HEARING OFFICER WILLIAMS: That's cited
18 in your testimony, in the supplement that you're
19 reading from?

20 MR. KRAMER: No, it's in our exhibit
21 list --

22 HEARING OFFICER WILLIAMS: It is?

23 MR. KRAMER: -- however; it's 2G, as in
24 golf. And we have copies if you'd like.

25 HEARING OFFICER WILLIAMS: Yeah, could

1 we have a copy?

2 (Pause.)

3 MR. KRAMER: I believe the applicant, I
4 think he cited this, as well, --

5 HEARING OFFICER WILLIAMS: Okay.

6 MR. KRAMER: -- in his prefiled
7 testimony.

8 HEARING OFFICER WILLIAMS: Okay.

9 MR. HARRIS: No. But we received a copy
10 from you late Friday the 14th.

11 MR. KRAMER: You cited one of these,
12 didn't you?

13 MR. RUBENSTEIN: Yeah, but there are
14 several.

15 MR. HARRIS: Yeah, --

16 MR. RUBENSTEIN: They're different.

17 MR. HARRIS: -- that's a different -- we
18 did cite a site -- cited sites, yeah -- cited a
19 sites memo. But it was not the sites memo you
20 cited.

21 (Pause.)

22 MR. WALTERS: Now the EPA interpretation
23 of shutdown is shutdown or curtailment, and that's
24 the basis of what we considered to be necessary
25 for compliance with the federal Clean Air Act law.

1 And essentially a partial shutdown is a
2 curtailment at a site. And essentially we
3 determined were, in terms of the ERCS provided, if
4 the ERC, itself, was a shutdown and that shutdown
5 was greater, in and of itself, greater than the
6 major source thresholds, those are the ones we
7 considered problematic.

8 We did not look at all the shutdown
9 credits and say they're major source shutdowns
10 because we didn't know if they came from a major
11 source or major source curtailments, because we
12 didn't know if they were from major sources.

13 However, if a shutdown, in and of
14 itself, would be greater than a major source
15 threshold, then it would obviously be from a major
16 source. So that was in terms of those particular
17 credits.

18 The third issue that we had is the fact
19 that the applicant is using a credit that was
20 originally allocated to Pastoria. And basically
21 our feeling on that particular issue is that we
22 need to go through a formal amendment on Pastoria
23 to change the mitigation package to free that
24 credit for the use on this project. And that's
25 all we're asking for is to free up that particular

1 credit is an amendment request for Pastoria.

2 BY MR. KRAMER:

3 Q But let me ask you, in doing so you will
4 want to make sure that Pastoria comes away still
5 with enough credits to meet its obligations,
6 correct?

7 A Yes.

8 MR. KRAMER: We have two exhibits on
9 that point. They're both on the exhibit list.
10 The first is 2A, it's the Pastoria Commission
11 decision; it's an excerpt from it. It was 400
12 pages, so I just printed the air quality section
13 with the cover page.

14 And the second document is our exhibit
15 2C as in Charlie, the December 5, 2002 letter to
16 Matt Trask of the Energy Commission from Barbara
17 McBride of Calpine.

18 (Pause.)

19 MR. KRAMER: Do you need copies, Jeff?

20 MR. HARRIS: Of the McBride letter?

21 MR. KRAMER: You certainly have it
22 somewhere.

23 MR. HARRIS: Yeah, we do.

24 MR. KRAMER: I can give you one, if you
25 want.

1 MR. HARRIS: If you have one handy, that
2 would be great.

3 BY MR. KRAMER:

4 Q And, Mr. Walters, if you could point out
5 on these two documents where the credit in
6 question appears? First, in the Pastoria
7 decision, and then in the letter from Calpine of
8 December 5th?

9 A Yeah, in the Pastoria decision on page
10 105, and I should note, the first of the two page
11 105s, obviously a pagination issue with the
12 decision, it would be the top credit on the table,
13 which is noted to be -- the pretransfer
14 certificate number is S-0205-2; the posttransfer
15 certificate number is S-1340-2.

16 And in the Calpine letter in the first
17 table it's provided, it would be the second one
18 down, the S-1340-2 credit.

19 Q And is that table that you're looking at
20 showing San Joaquin credits, or Pastoria credits?

21 A The second table is San Joaquin; and the
22 first one identified is the Pastoria table.

23 Q But in the Calpine letter?

24 A In the Calpine letter it's identified as
25 San Joaquin.

1 Q And does it appear in the Calpine letter
2 in the list of Pastoria credits?

3 A No, it doesn't.

4 Q Now, to your knowledge, you may have
5 already answered this, but has Calpine applied to
6 remove that credit from Pastoria?

7 A No, they have not formally applied.

8 MR. HARRIS: I'm going to object on the
9 basis that it requires him to make a legal
10 conclusion that an amendment is required. And I
11 don't believe an amendment is required. So it
12 wouldn't be a deficiency.

13 MR. KRAMER: Well, I don't think he --
14 the fact of whether or not they've applied I don't
15 know that that is dependent upon any legal
16 determination about their obligation.

17 HEARING OFFICER WILLIAMS: That's all
18 you're asking him, right?

19 MR. KRAMER: Right.

20 HEARING OFFICER WILLIAMS: Okay.

21 MR. WALTERS: To my knowledge no
22 amendment request has been filed for that credit.
23 I would like to note that I do believe an
24 amendment request was filed to change the PM10
25 credit status. They were originally using a NOx

1 for PM10 interpollutant trade. They changed that
2 to a SOx for PM10 interpollutant trade.

3 And it's my belief that an amendment
4 request and documentation to the District were
5 made in order to make that change to the offset
6 package.

7 MR. HARRIS: For Pastoria.

8 MR. WALTERS: For Pastoria.

9 BY MR. KRAMER:

10 Q Does this history have any relationship
11 to the staff's proposal of condition AQC-7?

12 A The history has a relationship due to
13 the fact that in reviewing the San Joaquin case
14 and its offsets, and then finding that some of
15 these offsets were already allocated; and then
16 going through and doing further research on
17 Pastoria and finding that most of the offsets, or
18 a great deal of the offsets, had been reallocated
19 and many new ones have been substituted without
20 our knowledge, that we felt that it was necessary
21 to have this type of condition so that we could
22 have a public process do our review of the new
23 mitigation package.

24 I'll give an example of a similar
25 situation where we'd certainly assume there would

1 be a different review if, for example, a
2 biological mitigation required 40 acres of land in
3 a particular area, and the applicant then decided
4 no, we're actually going to do 20 acres of land in
5 this more prime area, you would assume that an
6 amendment request would come in in order to make
7 the mitigation change.

8 Here they're making mitigation changes
9 that have been formally reviewed, formally gone
10 through the public notice initially, and then not
11 coming back for any reidentification and
12 reevaluation of the changes that they're
13 proposing.

14 Q Now when you talk about review, that
15 includes your CEQA review, is that correct?

16 A Correct.

17 Q So to your knowledge does the Air
18 District make an independent review of the
19 environmental impacts of the project with regard
20 to the air quality elements?

21 A In terms of the air quality impacts of
22 the operating parts of the plant, they do that
23 review. But they do not do a full CEQA review
24 that we're required to do. They don't do an
25 environmental justice review; they don't do review

1 of construction emissions. It's not an EIR-
2 equivalent process.

3 Q Did you have anything else to add with
4 regard to the Pastoria credit?

5 A No, I don't think so.

6 Q Okay. So, did you have any other
7 concerns about the offsets or lack of offsets for
8 any particular pollutant?

9 A Yeah, we have a concern about the lack
10 of offsets being proposed for SO2. There were a
11 couple of issues that were brought up in the
12 applicant's testimony today that I would like to
13 address about that.

14 Number one, I was the air quality
15 analyst that worked on Tracy, so I have an
16 intimate knowledge of that particular project.
17 And there were a few things that were said about
18 Tracy that are not true, or were not fully
19 developed.

20 Number one, the applicant for Tracy was
21 required, and essentially agree to, the use of SO2
22 credits. And, in fact, their use of SO2 credits,
23 they agreed to using the normal District offset
24 ratio of 1.5-to-1. And in essence for the Tracy
25 project they fully offset the project for all

1 pollutants, and therefore our finding for PM10
2 secondary pollutants was not as characterized by
3 the applicant's testimony.

4 They indicate that we used a table that
5 showed the net increase plus and minus in the
6 Tracy case. And that's just not true because the
7 project was fully offset. There was no need to do
8 any sort of table like that. And no table like
9 that was presented.

10 Also, in terms of what the applicant
11 provided in terms of their table and their
12 testimony, they leave one precursor out of the
13 table, so they give you a false impression of a
14 very large negative number.

15 The number they don't put in is the over
16 400 tons of ammonia that are emitted from the
17 plant that are also a PM10 precursor. And if you
18 let that into the mix, then instead of being a
19 negative number you have a positive 242.5 tons
20 that are not offset in terms of PM10 precursors.

21 All we're asking for at this point is a
22 one-to-one ratio on the SO2 credits be done.

23 Also --

24 Q So you're not requiring any offsetting
25 for the ammonia?

1 A No, we're not.

2 MR. FREITAS: Excuse me, I need a
3 clarification, Mr. Williams, if possible. That
4 statement that he just made, were you referring to
5 the Tracy plant when you said it emits over 400
6 tons of ammonia?

7 MR. WALTERS: San Joaquin.

8 MR. FREITAS: The San Joaquin plant?

9 MR. WALTERS: Yes. It is permitted to
10 emit up to 415.3 tons.

11 Let me get my train of thought back.

12 BY MR. KRAMER:

13 Q While you're doing that let me ask you a
14 question. Could you explain for the benefit of
15 the Committee and the rest of us, SO₂'s role in
16 the formation of PM₁₀? It's a precursor, is that
17 correct?

18 MR. WALTERS: Right. Essentially, much
19 like NO_x, SO₂ creates salts, most typically
20 ammonium sulfate or various sulfites, bisulfites,
21 different formations of oxidated sulfur compounds
22 with ammonia would be the predominant. Whereas
23 NO_x you get ammonium nitrate as predominant.

24 In essence what we have from an exhaust
25 stack that has a lot of ammonia and has a lot of

1 sulfur you essentially have a concentrated mix of
2 the two which will be even more likely to form a
3 secondary particulate than the general ambient air
4 would.

5 So that's another consideration to deal
6 with the secondary particulate and the likelihood
7 of the secondary particulate being formed from the
8 SO2 emissions.

9 One of the things that I'd like to
10 address is the fact that we actually provided a
11 proposal to the applicant whereby they could
12 mitigate this project, modify the Pastoria
13 project, and actually save a total of about 25 to
14 30 tons of SO2 ERCs.

15 Essentially right now the Pastoria
16 project is permitted to a fuel sulfur level that's
17 three times that for San Joaquin. And, you know,
18 as far as we know, there's no reason for it to be
19 any higher than any other projects in the state,
20 which are now being permitted about .25 grain per
21 100 -- cubic foot.

22 So if they were to come in with an
23 amendment and make that request, offset both of
24 the projects at a one-to-one ratio, they would
25 save 25 to 30 tons a year. And that was our

1 proposal to them to make this requirement be more
2 suitable. But, we didn't get any positive
3 feedback on that.

4 BY MR. KRAMER:

5 Q Let me make sure I understand you.
6 Pastoria is to the south of here, is that correct?

7 A Yes.

8 Q And what would its source of natural gas
9 be?

10 A I'm not sure if it would be Sempra or
11 the old SoCalGas, or PG&E, but it would be one of
12 the two.

13 Q Would it be the standard pipeline
14 quality gas?

15 A Yes.

16 Q The same type of gas that is being
17 proposed for this project? Same quality of gas?

18 A Yeah, same quality of gas.

19 Q And for Pastoria they have committed
20 some offsets already for SO2?

21 A They've committed quite a bit of offsets
22 for SO2.

23 Q Okay. Are you saying that if they
24 lowered the assumption, the assumed amount of
25 sulfur in the gas to what you expect to be

1 realistic, then they would free up enough credits
2 that are currently dedicated to Pastoria, so that
3 they could apply those to this project and still
4 have some left over?

5 A Yes.

6 Q So it would cost them nothing to go work
7 with that solution that you proposed?

8 A Whatever it would cost them to prepare
9 the amendment request.

10 Q Okay, but they would not have to buy any
11 more offsets?

12 A No. In fact, they would have extra
13 offsets afterwards.

14 Q Okay. Thank you. Do you have any other
15 concerns about the ERCs that are proposed?

16 A No, I think I've addressed all the major
17 concerns.

18 Q Earlier today Mr. Rubenstein expressed
19 concern that the staff modify the meteorological
20 data. Could you explain why you did so?

21 A Yeah, let me explain exactly how much I
22 modified, just to give everybody a sense of what
23 was done.

24 Essentially what I did is I did a review
25 of the met data and found several problems, one of

1 which was creating some rather significant, what I
2 considered over-estimations of the modeling
3 results. Particularly for construction.

4 And the reason for that turned out to be
5 how the data was being filled, essentially the
6 missing data and how it was being filled.

7 What it did is created some situations
8 where you'd have a calm hour right before you had
9 a high wind speed hour during either a nighttime
10 or early morning condition, which would create a
11 combination of very high wind speed and through
12 using the PCRAMETTE program, a stable condition.
13 A very high wind speed and a stable condition are
14 not suitable to be together. They don't fit in
15 the Turner method. And they were essentially a
16 remnant of how the data was pre-pre-processed by
17 the applicant in terms of how they did their data
18 filling.

19 One of the other issues we found in the
20 data is that essentially all of the data, or
21 almost all the data was offset by an hour, the raw
22 data and the process data. Now, we didn't
23 consider it generally a major issue. We did bring
24 it up to the applicant and they decided they
25 didn't want to fix the data.

1 But however, since over-averaging of
2 periods wouldn't create much of a difference in
3 the modeling results, we didn't make them go back
4 and figure out why that happened, or to redo the
5 modeling numbers. I actually have some
6 illustrations of that, but I guess I'll leave them
7 in my pocket for now.

8 The other issue was that the applicant
9 identified how they filled missing data. Actually
10 they identified it twice. First they identified
11 back in the data adequacy period that they filled
12 missing data for wind speed, wind direction and
13 temperature in using linear interpolation to
14 replace its missing hours when the block of
15 missing hours was three hours or less. So that's
16 what they initially said they did.

17 Then in their response to our issues
18 with the met data in their latest submittal, they
19 identified that missing data period of larger than
20 one hour were coded as calm. So they only filled
21 one-hour gaps.

22 Well, in looking at the met data neither
23 of those is strictly true, because I found a
24 significant number of one-hour gaps that were
25 filled as calm, so essentially I had some problems

1 with how the data was, like I said, pre-pre-
2 processed before it went into the PCRAMETTE
3 program.

4 And so I made corrections of 69 hours
5 out of 43,824 just to deal with these problems of
6 unsuitable wind speed and stability class. And
7 that's all I did.

8 The result of that was to lower my
9 impact results, not to raise my impact results.
10 And essentially only to lower my one-hour results,
11 which were coming out what I considered unsuitably
12 high, which initially made me go and look at the
13 modeling results, you know, so -- or the
14 meteorological data, I should say, so intently.

15 The applicant also indicated that San
16 Joaquin didn't fix, or they just used the
17 meteorological data that was provided to them.
18 They didn't make any fixes.

19 Well, number one, they wouldn't have
20 found the problem I had, because they didn't do
21 construction impact modeling, so they wouldn't
22 have seen these one-hour numbers that were
23 problematic -- had they done a similar analysis
24 that I did for construction impacts.

25 Number two, I discussed the issues I was

1 having with San Joaquin with Leland Villalvazo and
2 he identified that he didn't look at the met data
3 as closely as I did.

4 Q Who is he?

5 A He's the lead modeler at the District.
6 And, in essence, the results that were obtained
7 for the operating plant weren't affected by the
8 problems. Only the construction results, and
9 that's why I made those revisions. So that in my
10 construction results I wasn't having impacts that
11 were undue to the project.

12 Also in terms of the characterization of
13 how we did the modeling, I'd like to just note
14 exactly what we did in order to characterize the
15 site for construction.

16 We identified basically, as the
17 applicant did, three different types of emission
18 sources during construction. There's basically
19 the fugitive emissions that occur on the open
20 areas. There's fugitive dust that occurs due to
21 activity, whether it's road travel or a bulldozer
22 or a scraper running over the land. And then
23 there's the tailpipe emissions from the
24 construction equipment.

25 The applicant's modeling analysis put

1 all three of those into area sources of
2 approximately 42 acres. Even though they
3 identified the active construction area to be
4 only, in their emission estimates, to be only
5 about 19 acres.

6 What I did instead, particularly in
7 looking at the worst case numbers, in terms of the
8 tailpipe because I was, to some degree, very
9 concerned with that, is I used point sources for
10 all of the construction equipment, because they
11 are essentially point sources.

12 In particular the month that I was
13 modeling was month 16, which had mainly a lot of
14 cranes and other pieces of equipment that wouldn't
15 move very much anyway and would essentially be
16 that of a stationary source. And, in fact, in any
17 of the construction analyses that we get, we get
18 point sources being done, rather than area
19 sources.

20 Also, in terms of the fugitive dust
21 emissions that were actually being developed
22 through the movement, as opposed to just through
23 the wind, those were identified as a series set of
24 volume sources over the active area of the
25 construction site, not over the 42 acres, but over

1 the general area that was being constructed during
2 what was the peak month for the initial
3 construction period.

4 And those set of volume sources and
5 point sources actually provide what are more
6 representative release types for those type of
7 emissions and actually resulted in lower results.
8 So, in general, the applicant mischaracterized
9 what we did to create higher results, and that's
10 not true.

11 In fact, we worked very hard because the
12 applicant wouldn't revise their modeling results
13 when we asked them to in January of last year, to
14 lower the results on our own by using a more
15 detailed modeling approach.

16 Q The applicant has argued that the
17 Commission should just rely on the Air District's
18 rules for the control of fugitive construction
19 dust. And did you consider that as an option in
20 designing the conditions?

21 A Well, there's a couple of things we do
22 in designing the conditions. Number one, we like
23 to lay out all of the requirements in the
24 condition so that it's clear, rather than
25 referencing a specific rule, particularly when we

1 would actually be referencing a series of rules
2 under regulation 8.

3 That would be very hard for the
4 compliance division to make any determination of
5 compliance because they would have to then go
6 through all the rules and try to figure it out.

7 What we do is we provide those specific
8 requirements in the rule, itself. Now, in terms
9 of issues with whether or not regulation 8 is
10 enough, regulation 8 only deals with the fugitive
11 dust sources; it doesn't deal with any tailpipe
12 emission controls.

13 So, in that aspect, no, it's not;
14 because it only deals with part of the emission
15 problem. It certainly didn't deal with what we
16 considered one of the important issues, which was
17 the toxic emissions from the diesel equipment.

18 I guess also in characterizing AQC-3 and
19 its use on other projects, and how it was
20 referenced in Tracy, I would also like to note
21 that the similar condition was again
22 mischaracterized. In Tracy there is not an or
23 requirement in terms of three requirements. It
24 specifically requires 1996 engines, ultra low
25 sulfur diesel and the soot filters, all three.

1 And there's a number of other projects
2 in the Central Valley, almost all of the ones that
3 have been done in the Central Valley over the last
4 few years require all three. And to tell you the
5 truth, I can only think of one exception, and
6 that's Henrietta. And Henrietta is a very small
7 project with a very different set of receptors,
8 much lower emissions. And so we did consider it
9 more reasonable for that particular project.

10 Q How much smaller is it?

11 A Henrietta is two LM6000s; they're
12 peakers, simple cycle, less than 100 megawatt, in
13 comparison to roughly 1100 megawatts.

14 Q And what is different about the
15 receptors in the vicinity of Henrietta in
16 comparison to this case?

17 A Essentially the number of receptors are
18 different, and the distance to receptors was quite
19 a bit more in Henrietta. And you couple that with
20 a much lower emissions from a much smaller
21 project, and we didn't have the same concerns both
22 from air toxics point of view, and from just the
23 general dust impact point of view.

24 Q And you said the receptors are further
25 away, is that correct, in Henrietta?

1 A Yes, the receptors are further away.

2 Q And did you say there were fewer or more
3 of them?

4 A Overall there'd be fewer of them. The
5 main receptor block was actually on the Lemoore
6 Naval Air Station in a small housing development
7 about a mile north of the site. But that housing
8 development is certainly smaller than the town of
9 San Joaquin.

10 ASSOCIATE MEMBER GEESMAN: In the Tracy
11 case, did you encounter the federal preemption
12 argument as it related to soot filters on post-96
13 engines?

14 MR. WALTERS: We haven't encountered
15 that argument until today.

16 BY MR. KRAMER:

17 Q Did you have any corrections to make to
18 your previous written testimony?

19 A Yeah, I did have one correction I'd like
20 to make. On page 4.1-11, and the applicant
21 pointed out that we did have an error. And I
22 would like to make that correction. It is an
23 error.

24 We identified in one specific location
25 that the classification for ozone nonattainment

1 was extreme. We identified it correctly 12 other
2 times in the document, but inadvertently we put
3 extreme rather than severe in the area where we
4 were just talking about. Not where we're talking
5 about planning requirements or offsets
6 requirements, just in the general description of
7 ozone.

8 And so I would like that sentence to
9 read, and if I can find the specific location --
10 well, basically the sentence would read: The San
11 Joaquin Valley air basin is classified as a
12 federal and state severe nonattainment area for
13 ozone.

14 Q And I think you just said in the staff
15 assessment, was that actually in the addendum?

16 A Yeah, it was in the addendum to the
17 staff assessment.

18 MR. KRAMER: Okay, we'll move on to Dr.
19 Greenberg.

20 (Pause.)

21 HEARING OFFICER WILLIAMS: Ms. Court
22 Reporter, how are you doing? You okay?

23 MR. FREITAS: Very patient woman.

24 BY MR. KRAMER:

25 Q Dr. Greenberg, you did not prepare the

1 air quality section, is that correct?

2 A No, I did not.

3 Q But does it -- do some of the conditions
4 in it affect your conclusions in the sections that
5 you did prepare?

6 A Yes, indeed.

7 Q And just again to remind us, which
8 sections did you prepare of the staff assessment
9 in this case?

10 A I prepared four sections of the staff
11 assessment, three of which are impacted by the
12 proposed conditions, two of the proposed
13 conditions in the air quality section.

14 Those three sections would be public
15 health, worker safety and fire protection, and
16 waste management. And, in fact, public health and
17 waste management direct refer to air quality
18 section.

19 Q Okay, now could you tell us the
20 conditions that you refer to there that are
21 relevant to your analysis?

22 A Yes, that's AQC-3 and AQC-5.

23 Q Okay, and how is AQC-3 relevant to your
24 analysis?

25 A Well, if I may, I'd like to also include

1 in my answer AQC-5, so both of those. Because 5
2 is essentially the method that you insure that
3 AQC-3 is followed.

4 And the reason that it's very important
5 is because there is a very strong public health
6 component to AQC-3. And as Mr. Walters had
7 mentioned, he did consult with me, and it is
8 indeed referenced by me in my public health
9 section; and, in fact, even in the waste
10 management section.

11 You have significant amounts of PM10 and
12 PM2.5 that will be generated during site
13 preparation and site construction activities.

14 The second point is there is indeed a
15 PM10 and 2.5 problem in the San Joaquin Valley.
16 Specifically in Fresno County. And there are
17 extremely high asthma rates in Fresno County. And
18 this is laying the basis for the public health
19 concern about the generation of particulate matter
20 of 10 microns or less, or 2.5 microns or less,
21 from the two sources that I've discussed in public
22 health, as well as in waste management. And that
23 is those two sources being diesel emissions from
24 the construction, as well as that fugitive dust
25 emissions during construction activities generated

1 ether by wind erosion or by vehicular traffic, or
2 by the actual excavation using equipment, you
3 know, front-end loaders, et cetera.

4 It's a waste issue because one of the
5 requests during data requests, the applicant
6 provided a site characterization which showed that
7 there could potentially be hazardous waste on this
8 site. I say potentially because the data showed
9 that there was indeed hazardous waste on this
10 site, but the data could also -- that could also
11 be explained by how the data was collected. In
12 other words, how the site was sampled.

13 And I gave the applicant two
14 alternatives. One, go back and retest the soils
15 on the site to confirm or to deny whether or not
16 there is hazardous waste on the site. Or assume
17 that you're sampling data is indeed correct, that
18 there is hazardous waste on the site and protect
19 the workers and protect the public properly by
20 insuring that when any soils are disturbed that
21 they would be disturbed to an absolute minimum.
22 And that there would be a minimal amount of dust
23 generated during any type of site preparation and
24 site construction activities.

25 So, there's a very strong concern by

1 myself in protecting worker health and public
2 health on dust being generated, either from the
3 soils on the site, or particulate emissions from
4 diesel.

5 The high asthma rates in Fresno County,
6 if I could just take a second, are documented in
7 two surveys. One of them is the California County
8 Asthma Hospitalization Chart Book, which is
9 prepared by the California Department of Health
10 Services. This is August 2000. It refers to --

11 HEARING OFFICER WILLIAMS: Excuse me,
12 Dr. Greenberg, is that in your testimony? Is that
13 a part of your testimony?

14 DR. GREENBERG: No, it is part of my
15 presentation today.

16 HEARING OFFICER WILLIAMS: Has the
17 applicant seen it?

18 DR. GREENBERG: No.

19 MR. HARRIS: We have not.

20 HEARING OFFICER WILLIAMS: Do you have
21 copies?

22 DR. GREENBERG: No. We have the URL;
23 they can get it off the website. It's a state
24 document.

25 HEARING OFFICER WILLIAMS: Are you

1 familiar with the document?

2 MR. HARRIS: No.

3 HEARING OFFICER WILLIAMS: Is your
4 public health witness available on the telephone?

5 MR. HARRIS: It's 6:00 in Akron, Ohio,
6 so maybe. Let's try to phone him, I guess.

7 MR. KRAMER: Wasn't he going to be
8 present for the public health discussion today?

9 MR. HARRIS: No, he was the reason we
10 asked for telephonic witnesses.

11 MR. KRAMER: Okay.

12 MR. HARRIS: John Lowe is located in
13 Akron.

14 HEARING OFFICER WILLIAMS: Let's go off
15 the record.

16 (Off the record.)

17 HEARING OFFICER WILLIAMS: At the break
18 we've decided to stipulate that the asthma rates
19 in Fresno County are among the highest in the
20 state. All parties have agreed to that
21 stipulation.

22 And with that, we'll continue.

23 DR. GREENBERG: To continue on the next
24 point I would make is that particulate matter may
25 be a cause of asthma, but there is no doubt in the

1 scientific community that it exacerbates pre-
2 existing asthma.

3 There is also little doubt in the
4 scientific community that particulate matter that
5 have attached to it hazardous air pollutants,
6 which we -- that's the HAPs, or what we call in
7 California regulations, toxic air contaminants,
8 attached to it, such as diesel particulates which
9 contain toxic air contaminants adhering to the
10 surface of the particulate, or soils that have
11 hazardous waste attached to it are, indeed,
12 causative factors of asthma.

13 There are other causes of asthma other
14 than environmental pollution. That is just but
15 one cause.

16 When you put that together then with
17 this being a cause, and certainly an exacerbation,
18 of asthma, and a high asthma rate in the state,
19 and high particulate matter in the air in Fresno
20 County and in San Joaquin County, that leads one
21 then to the conclusion that there is a public
22 health issue involved in generating large amounts
23 of particulate matter, particularly over a 22- to
24 24-month construction phase.

25 Now, I had recommended in Waste-6 that

1 in order to deal with the potential problems of
2 hazardous waste in the soil, that a dust
3 suppression system be developed that would be
4 reviewed and approved, not only by the CEC CPM,
5 but also by the California Department of Toxic
6 Substances Control.

7 And the applicant came back and asked,
8 and this was all done in writing pre this hearing,
9 would I agree to drop that request from Waste-6
10 and just go with air quality condition 5 -- I'm
11 sorry, air quality condition 3. And my response
12 was yes.

13 So I was quite surprised to walk in here
14 today and hear testimony to say, oh, by the way,
15 we'd like to now get rid of air quality condition
16 3 and just go with the San Joaquin Valley Air
17 Pollution Control District's dust suppression or
18 dust mitigation program.

19 I cannot support that. And encourage
20 you either to not drop ACQ-3, or instead I'll have
21 to reverse my position and instead require a
22 specific program under Waste-6 for a number of
23 reasons.

24 One, the San Joaquin Valley Air
25 Pollution Control District dust mitigation program

1 was not designed to address control of dust that
2 contained hazardous air pollutants or hazardous
3 waste. My understanding is it was designed really
4 to address compliance or attainment with the
5 federal PM10 standard.

6 Second of all, that could be easily --
7 the District's program could be easily amended
8 either by the District or by application to the
9 Air District Hearing Board. And having served on
10 the Bay Area Air District Hearing Board for six
11 years, I know very well that this is a fact that
12 can indeed occur. And that therefore, while the
13 CEC could certainly give its opinion to the San
14 Joaquin Hearing Board, it would be the San Joaquin
15 Hearing Board making a decision as to whether or
16 not to modify their rule. And not the Energy
17 Commission making a decision whether to modify the
18 dust mitigation program.

19 And third of all, as Mr. Walters had
20 pointed out, the San Joaquin rule does not address
21 tailpipe emissions. And therefore PM10 and PM2.5
22 from the diesel exhaust, which could be
23 significant, and we already know that at the
24 fenceline it's up to the fenceline it's greater
25 than the proposition 65 level of significance, we

1 wouldn't know it unless we monitoring for it.
2 Because the San Joaquin rule does not address
3 tailpipe emissions.

4 Now, the applicant also estimated that
5 there'd be about 118 mcg/cubic meter 24-hour value
6 for PM10 due to construction activities. You
7 cannot see 118 mcg of particulate matter per cubic
8 meter of air. You cannot see 500 mcg particulate
9 matter per cubic meter of air. You can see 5000
10 mcg/cubic meter of air. I was going up by an
11 order of magnitude there.

12 And so while I agree with Mr. Rubenstein
13 that if you see dust being generated there is PM10
14 present, the obverse of that is not true. If you
15 don't see dust generated it does not mean that
16 there is not PM10 emitted.

17 And, in fact, most PM10 from diesel,
18 modern diesel engines do not emit visible black
19 smoke that you can see, but they're emitting a lot
20 of PM10 and PM2.5 which you cannot see.

21 Therefore, visual inspection is
22 inadequate. It's fraught with uncertainty. You
23 would need constant vigilance, you'd need multiple
24 persons. You wouldn't be able to see all the
25 emissions.

1 And then you're interjecting a human
2 element as opposed to the dispassionate and
3 analytical results of a printout from a machine.
4 You're relying now on a person being vigilant in
5 saying, no, I didn't see anything, or yes, I did,
6 or I only saw something for a little bit.

7 And we don't want to leave it to human
8 error. And it's important to verify the
9 effectiveness of their dust suppression program
10 because of the public health implications.

11 BY MR. KRAMER:

12 Q Have you had a chance to -- let me back
13 up. You prepared a health risk assessment for the
14 project, correct?

15 A Correct.

16 Q Including the construction?

17 A We reviewed and evaluated and checked
18 the calculations of the applicant's health risk
19 assessment.

20 Q Okay. Mr. Rubenstein today said that he
21 had re-run those calculations with the removal of
22 the soot filters. Have you had a chance to see
23 those calculations?

24 A I'm not so sure that I understood his --

25 MR. HARRIS: I'm going to object on --

1 DR. GREENBERG: -- question -- his
2 answer that way, yeah.

3 MR. KRAMER: Okay.

4 MR. HARRIS: I'm going to object, I
5 don't think he said that. That's --

6 DR. GREENBERG: I agree.

7 MR. HARRIS: Okay.

8 BY MR. KRAMER:

9 Q Okay, let me try again. Do I understand
10 it correctly then he said, I gather his original
11 model did not assume soot filters, and so then he
12 was simply -- okay, so those are the calculations
13 you reviewed, Mr. Greenberg?

14 A Yes. Yes.

15 Q And do you agree with his summary of the
16 results that he stated today?

17 A Yes. And if you look at the operational
18 phase particulate matter, his estimate for worst
19 case emissions would be .5 mcg of PM10 per cubic
20 meter of air. While for construction I believe it
21 was 118 mcg of particulate matter per cubic meter
22 of air.

23 Q So what would your conclusion be about
24 whether there are any significant environmental
25 impacts if the soot filters were removed, were not

1 placed on the vehicles as AQC-3 proposed?

2 A Well, the applicant and also myself, in
3 my staff assessment, agreed that there was a
4 significant impact due to construction activities
5 due to emission of particulate matter from, you
6 know, the diesel construction equipment.

7 Therefore, I concluded in order to
8 reduce that to below a level of significance they
9 would have to place the catalytic soot filters on
10 the diesel equipment, which serve not only to
11 filter out particulate matter, but because of the
12 catalytic ability, will also reduce carbon
13 monoxide and some hydrocarbons, as well.

14 Q So, without the soot filters would your
15 opinion be that there would be a significant
16 environmental impact from construction activities?

17 A Yes, and it was identified in the AFC as
18 well as the staff assessment.

19 Q Thank you.

20 MR. KRAMER: We have no further
21 questions. I believe -- can we go off the record
22 for a second?

23 HEARING OFFICER WILLIAMS: Off the
24 record.

25 (Off the record.)

1 HEARING OFFICER WILLIAMS: On the
2 record.

3 MR. HARRIS: Oh, wait, can we go back
4 off for a second?

5 HEARING OFFICER WILLIAMS: Yes, off the
6 record.

7 (Off the record.)

8 MR. KRAMER: Before we close our direct,
9 I just wanted to ask that the Russell City, the
10 air quality portion of the Russell City decision,
11 be introduced into the record. We don't intend to
12 offer any testimony on it, but it describes or
13 refers to the Los Esteros experiment, if you will.
14 And we can argue the significance in the briefs.

15 MR. HARRIS: I think you're always able
16 to cite to Commission decisions, so we wouldn't
17 object.

18 MR. KRAMER: Okay.

19 MR. HARRIS: I don't think you even need
20 to introduce it, but we don't object.

21 MR. KRAMER: Well, if you don't, then we
22 won't bother. We'll just -- of course, we need to
23 get it in that binder at some point, so why don't
24 I introduce it as our next --

25 MR. HARRIS: That's fine.

1 MR. KRAMER: Okay, thank you. The
2 letter on that would be -- our next letter?

3 HEARING OFFICER WILLIAMS: I think we're
4 at Q.

5 MR. KRAMER: We did Q. R?

6 MR. HARRIS: 2R, right?

7 MR. KRAMER: 2R, okay. I'll provide
8 that in the binder.

9 HEARING OFFICER WILLIAMS: What was Q?

10 MR. HARRIS: Q was the -- this table.
11 Staff's table.

12 HEARING OFFICER WILLIAMS: Okay. We'll
13 admit those. We'll swear the witness.

14 Whereupon,

15 JOHN LOWE
16 was called as a witness herein, and after first
17 having been duly sworn, was examined and testified
18 as follows:

19 MR. HARRIS: Mr. Lowe's testimony and
20 qualifications were prefiled and the parties have
21 stipulated to those qualifications and the
22 introduction of the testimony by Mr. Lowe. We'll
23 give as exhibit numbers -- actually his prior
24 filings have already been identified in section 8
25 of the AFC as exhibit 1. Staff assessment comment

1 is exhibit 3A.2.

2 So with that, we'd make Dr. Lowe
3 available for questions from Mr. Freitas.

4 CROSS-EXAMINATION

5 BY MR. FREITAS:

6 Q Good afternoon, Mr. Lowe -- or good
7 evening.

8 A Yes.

9 Q I'm going to direct some of my
10 questions, -- going to be around concerning the
11 California Code of Regulations Title 22, section
12 6306. And it'll be contained in the memorandum of
13 February 11th mailing of the docket, staff's
14 response to applicant's proposed changes.

15 Namely on the Legionella. Are you
16 familiar with that? The Legionellosis?

17 A I'm familiar with the issue. I haven't
18 seen that memorandum.

19 Q Okay. In the memorandum it says the
20 cooling tower facility must have a high efficiency
21 drift eliminator designed to reduce drift to .0005
22 percent of circulating water cooling water. In
23 addition, the circulating water must contain
24 conditioning chemicals including sodium
25 hypochlorite which will be shock-fed into the

1 system to act as an effective biocide.

2 My question is .0005 percent
3 circulating, how is it determined what the drift
4 would be, under which wind speeds?

5 A I can't speak to the actual performance
6 of that system. What my analysis of Legionella
7 discussed was under the conditions under which
8 this could be an issue. And based on that,
9 additional protective measures were identified.

10 As far as I'm aware of, these are
11 standard measures for performance of mitigation
12 under these mitigation systems.

13 MR. HARRIS: Keith and John, Gary
14 Rubenstein's probably actually the better witness
15 to answer that question for you. Would you like
16 Gary to provide you a more detailed answer?

17 MR. FREITAS: Right now?

18 MR. RUBENSTEIN: The answer's fine.

19 HEARING OFFICER WILLIAMS: Okay, I guess
20 -- I've been told the answer is fine, so I'm sorry
21 for interrupting.

22 MR. KRAMER: If I may, though, this --

23 HEARING OFFICER WILLIAMS: Hold on,
24 we've got --

25 COURT REPORTER: I could not understand

1 one word that was said.

2 MR. FREITAS: Yeah, I didn't even get
3 the answer.

4 (Pause.)

5 HEARING OFFICER WILLIAMS: Maybe we can
6 do some tests. Do you want to try some tests?

7 We'll be off the record. Let's go off
8 the record.

9 (Off the record.)

10 HEARING OFFICER WILLIAMS: Okay, we'll
11 go back on the record if everybody is ready. Do
12 you need to re-ask the question?

13 MR. FREITAS: Yeah, I'm going to re-ask
14 it because I think I have some -- these gentlemen
15 helped me focus clarity here.

16 HEARING OFFICER WILLIAMS: Okay.

17 MR. FREITAS: A little different
18 question.

19 BY MR. FREITAS:

20 Q I'm going to pose a different question
21 to you, Mr. Lowe.

22 A Speak up a bit, please.

23 Q I'm going to pose a different question.
24 Are you familiar with the containment of a half a
25 million gallons of wastewater at the site? Or the

1 containment of half a million gallons of cooling
2 water?

3 A I'm not sure I understand your question.

4 Q Are you familiar with the design of the
5 facility, the proposed design of the facility?

6 A My responsibility was not the design of
7 the facility, so I'm not sure I understand your
8 question.

9 Q Okay. Are you familiar with the organic
10 makeup of the water that's going to be used in the
11 cooling system? Have you done any tests on the
12 water that's going to be used in the cooling
13 system?

14 A I, myself, have not done testing on the
15 water. I reviewed information that was provided
16 to me.

17 Q Is there any correlation between or
18 relationship between the organic makeup of the
19 water, if it was tested, as to what the outcomes
20 would be for emissions from the power plant?

21 A None that I am aware of.

22 Q Have you conducted any tests, or do you
23 know anyone who's conducted any tests of the
24 actual water that's to be used in the cooling
25 system at the power plant?

1 A I have evaluated emissions to the air
2 from cooling water under different circumstances,
3 but not this specific facility, but other
4 facilities.

5 Q Will it be like water that will be used
6 at this facility that you've tested?

7 A It was reclaimed treated water.

8 Q It was from a city source?

9 A I don't understand when you say from a
10 city source. Can you be a little more specific?

11 Q Yes. This water's coming from the
12 wastewater treatment plant of the City of Fresno.

13 A What I've evaluated is water from a
14 wastewater plant. I haven't done this
15 specifically for wastewater for the City of
16 Fresno's wastewater plant.

17 Q Have any tests been done that you're
18 aware of of the mound water, what they call and
19 label the mound water from the Fresno sewer
20 treatment plant?

21 A I am not aware of what testing's been
22 done on the mound water. That's not to say it
23 hasn't been done, but I am not aware of it.

24 Q Are you familiar with the reverse
25 osmosis system that's supposed to be -- that's

1 being implemented and employed in the process of
2 the closed system circulating water for the
3 cooling system of the plant?

4 A I'm not a water treatment engineer, so I
5 can't say I'm familiar with a reverse osmosis
6 system.

7 Q Are you familiar with any kinds of
8 filtering systems with any power plants that use
9 reclaimed water in the cooling system?

10 A Again, I am not a water treatment
11 engineer.

12 Q So from the health aspect of using
13 reclaimed water you can't supply any information
14 about those last three questions?

15 A If I'm provided information on what the
16 level of particular chemical substances or other
17 types of constituents are in the water, I provide
18 a public health analysis of -- that kind of
19 information, as far as what is in water prior to
20 or after treatment, that information is provided
21 to me by an engineer.

22 Q Okay, let me ask you a question. Are
23 you aware of a system or any filtering systems
24 that can filter out DBCPs?

25 A Again, that's a question that a water

1 treatment engineer can answer for you.

2 Q Are you familiar with DBCPs?

3 A I am very familiar with DBCP.

4 Q Are you aware that Fresno has a high
5 rate of DBCPs in their wells around the City of
6 Fresno?

7 A I am aware that there is DBCP in
8 groundwater in Fresno County.

9 Q Are you aware that some of the wells
10 have been closed down or no longer used because of
11 the levels of DBCPs that have been found?

12 A Yes, I'm aware that there have been some
13 closures of wells because of the DBCP in
14 groundwater.

15 Q Should those DBCPs find their way to the
16 reclaimed water that's being used in the cooling
17 system at this particular power plant, is there a
18 way or a system that you're aware of that can
19 filter out those DBCPs?

20 A Again, that's a question that would be
21 directed to a water treatment engineer.

22 Q Do you know which particular biocides
23 will be used to treat the cooling system to
24 prevent the growth of the Legionella?

25 A I'm not aware of what specific biocide

1 will be used for water treatment.

2 Q Are you familiar with what particular
3 system that the applicant proposes to use to
4 minimize the growth of Legionella and other
5 microorganisms in the reclaimed water?

6 A I understand that a biocide is supposed
7 to be used to minimize the growth of any
8 organisms. I am not aware of what the specific
9 biocide is.

10 Q As a health expert are you capable of
11 testifying that in regards to the effect of drift
12 of I guess we could call it -- of the cooling
13 tower drift if it was being blown more than 100 to
14 200 feet offsite for a number of days in a row,
15 would there be any effect if it blew in the same
16 direction for a number of four or five sustained
17 days? Would there be any more or less effect for
18 incidence of contaminants being -- of the
19 Legionella being more concentrated in that area
20 versus a nonwindy day?

21 A There would be no discernible difference
22 in any levels of Legionella organisms, should they
23 be present at all.

24 Q Are you familiar with the flashing
25 process that will occur when the cooling water

1 from the cooling system is used to cool the
2 turbines at the power plant?

3 A Again, that's a design issue which I
4 cannot say I'm specifically appointed with.

5 Q Well, I'm kind of more concerned about
6 the health implications of flashing water that
7 contains DBCPs. I'm wondering --

8 A Oh, flashing water that contains DBCP.
9 The potential for exposure to splashing water
10 containing DBCP would be insignificant. The
11 concentrations of DBCP that would be present --
12 the concentrations are so low that there would be
13 no potential for risk through skin contact with
14 any DBCP that might be in the water.

15 MR. FREITAS: That's all I have.

16 HEARING OFFICER WILLIAMS: Thank you,
17 Mr. Freitas. Okay, at this point I think that we
18 will break for dinner and --

19 MR. HARRIS: Can we go off the record?

20 HEARING OFFICER WILLIAMS: -- we will
21 excuse Mr. Lowe. Mr. Lowe, --

22 DR. LOWE: Yes.

23 HEARING OFFICER WILLIAMS: Thank you
24 very much, you're excused.

25 DR. LOWE: Thank you.

1 MR. FREITAS: You may want to cross.

2 MR. HARRIS: No, I don't have anything
3 else. I want to move my documents, public health
4 documents, the testimony previously identified.

5 HEARING OFFICER WILLIAMS: Okay. Those
6 will be admitted.

7 MR. HARRIS: I only have one question
8 for Mr. Haber. And I don't know that we have to
9 keep him here all night. I wanted to ask him now
10 and --

11 HEARING OFFICER WILLIAMS: Okay. Well,
12 let's -- we'll stay on the record to allow
13 applicant to cross-examine our witness from the
14 EPA, Mr. Haber.

15 MR. FREITAS: Because I'm going to have
16 questions for Mr. Haber, too. Probably about ten.

17 MR. HARRIS: How many minutes is that,
18 Keith?

19 MR. FREITAS: About ten.

20 HEARING OFFICER WILLIAMS: Are you
21 willing to stay?

22 MR. HABER: Yeah, I'd rather stay now
23 than stay --

24 MR. FREITAS: One per minute.

25 HEARING OFFICER WILLIAMS: We'll break

1 for dinner.

2 MR. FREITAS: I mean, you know, my
3 questions are one-minute questions. But if the
4 party, the witness takes ten minutes to answer the
5 question, that's not my --

6 (Laughter.)

7 MR. FREITAS: -- that burden shouldn't
8 be put on me, Mr. Williams.

9 HEARING OFFICER WILLIAMS: Let's have
10 him tackle it on a full stomach.

11 MR. FREITAS: Okay.

12 (Laughter.)

13 (Whereupon, at 5:40 p.m., the hearing
14 was adjourned, to reconvene at 6:20
15 p.m., this same evening.)

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EVENING SESSION

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6:20 p.m.

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HEARING OFFICER WILLIAMS: We're going

to pick up with applicant's cross-examination. I

don't believe we have -- do we have any public

members here who are here to comment on the

project? No? Okay.

Then we'll pick up with applicant's

cross-examination.

MR. HARRIS: Okay, thank you. I think

the way we're going to proceed is I have one

question for Mr. Haber. Mr. Freitas may have one

or two, and then at that point, so after I finish

my question I'll yield to Mr. Freitas so he can

hopefully let Mr. Haber leave at that point.

CROSS-EXAMINATION

BY MR. HARRIS:

Q So I want to turn to the infamous

rulemaking, EPA rulemaking from the Federal

Register, Thursday, February 13, 2003, the

proposed rule beginning on page 7330. You're

obviously familiar with that rule, Mr. Haber, is

that correct?

A Yes.

1 Q If that proposed rule is approved, as
2 proposed, would that be sufficient -- if the rule,
3 as proposed on February 13th, is approved, would
4 that be sufficient for EPA to remove its
5 opposition to the San Joaquin project?

6 A Yes, it would, because it make the
7 tracking system federally enforceable and it would
8 allow these credits to be entered as zero.

9 MR. HARRIS: I have no other questions,
10 thank you.

11 HEARING OFFICER WILLIAMS: Mr. Freitas.

12 CROSS-EXAMINATION

13 BY MR. FREITAS:

14 Q Mr. Haber, are you familiar with the
15 recent court ruling by Superior Court Judge
16 Stephen Kane in Fresno County Superior Court
17 regarding the judicial order allow the Air Quality
18 Control Board to cite pollution violators fines up
19 to \$34 million per violation?

20 A No, I'm not.

21 Q Are you aware that the Air Quality
22 Control Board had no fining authority prior to
23 that ruling?

24 A I guess I would be surprised about that
25 conclusion.

1 Q So your answer is no? Or yes?

2 A I'm not sure I'd agree with that
3 conclusion.

4 Q That they had no citing authority?

5 A That's correct.

6 Q Or how about let's put it this way, that
7 they had the ability to cite, but maybe not fine
8 prior to that order?

9 A EPA approved, in the mid '90s, the
10 District's Title 5 program which actually requires
11 that they have the authority to cite the minimum
12 statutory amount, which was at that time, I think,
13 roughly \$27,000 per day per violation.

14 So in order for us to have approved
15 their program they had to certify that they did
16 have that ability.

17 Q Would they still or do they today have
18 the ability to fine pollutant violators?

19 A As far as I know they have that
20 authority unless there's information that I don't
21 have.

22 Q How about to enforce the fines?

23 A Same answer.

24 Q Same? Do you think that the creation of
25 emission credits could lead the implementation of

1 a carbon trading schemes that companies would try
2 to jumpstart to get ahead of the future
3 restrictions? Would they create -- could it be a
4 precursor to creating --

5 A I think both of those programs are
6 moving ahead independently. Perhaps to some
7 extent the existence of trading program in
8 California and elsewhere serves as part of the
9 basis for carbon trading programs; that, as well
10 as trading programs like the federal acid rain
11 program.

12 Q Does the EPA have programs in place that
13 are incentive-type programs for power plants or
14 operators that are operating these types of
15 facilities to gain additional efficiencies or
16 benefits or credits from if they implement the
17 like credits, or does EPA allow credits for
18 offsets for changing engines over like the, I
19 don't know if you're familiar with the state's got
20 a program through Cummins Engines if you change
21 out an old Cummins engine with a new Cummins
22 engine, they give you a free or very cheap new
23 Cummins engine, high efficiency.

24 A Right. That's often known as the Moyer
25 program.

1 Q The Moyer program.

2 A And, yes, we support those kinds of
3 voluntary programs, as well as the regulatory
4 required offset programs.

5 Q Would it be in the best interests of an
6 applicant of proposing approval license in this
7 environment today to seek out the contractors that
8 participate in those programs?

9 A Well, as I understand the proposed
10 conditions of certification in this case, proposed
11 to be proposed by the Energy Commission, would in
12 fact require the use of cleaner engines. This was
13 discussed earlier today.

14 So, it would seem that perhaps in this
15 case a power plant developer not only should be
16 encouraged to do it, but isn't that going to be
17 required to do that.

18 Q Would that be part of one of the
19 elements that may be involved in the approval of
20 the process that you just described for Mr.
21 Harris, for Jeff?

22 A The use or nonuse of clean construction
23 equipment is a good thing, but it's not something
24 that's going to be required as a condition of
25 EPA's consent to this project.

1 MR. FREITAS: Thank you, that's all.

2 HEARING OFFICER WILLIAMS: Staff, do you
3 have anything further of Mr. Haber?

4 MR. KRAMER: No.

5 HEARING OFFICER WILLIAMS: Thank you,
6 sir, very much for coming and being involved in
7 our process. We certainly appreciate your doing
8 so.

9 MR. HABER: Thanks for having me.

10 HEARING OFFICER WILLIAMS: Okay. Thank
11 you.

12 MR. HARRIS: I guess I'll continue. I
13 think I'll try to do the questions for Dr.
14 Greenberg next. Hopefully they won't overlap with
15 anything with Mr. Walters.

16 CROSS-EXAMINATION

17 BY MR. HARRIS:

18 Q Dr. Greenberg, in some recent work you
19 performed for the City of Vallejo didn't you
20 conclude that Solano County residents experienced
21 some of the highest rates of asthma in California?

22 A That is -- if your question was does
23 Solano County experience some of the highest rates
24 of asthma --

25 Q No, I'll ask the question again. Didn't

1 you conclude in that work that Solano County
2 residents experience some of the highest rates of
3 asthma in California?

4 A Some of the -- yes.

5 Q And today you were saying that the same
6 is true in Fresno County, is that correct?

7 A That's correct.

8 Q So how many counties in California
9 experience the highest rates of asthma?

10 A Basically there's about three or four
11 that would experience what I call the highest
12 rates of asthma. One county may be number one
13 when it comes to overall rates. A second county
14 may be number one on children but lower on adults.
15 And so they'd rank number three or four on the
16 list.

17 Q You said -- I'm sorry --

18 A But it's interchangeable and I would
19 throw in Imperial County in that mix of
20 experiencing some of the highest rates of asthma
21 in the state.

22 Q Okay, those are based upon, you said,
23 upon your rankings, or was it on some other kind
24 of rankings?

25 A Well, there are two different rankings.

1 One was the California incident rates of asthma
2 hospitalization, so we're looking there. And
3 California Department of Health Services reports
4 of actual hospitalizations due to asthma. So
5 we're talking about very severe reaction.

6 The second was the 2001 study by UCLA.
7 And it ranked Solano County first, while the
8 California hospitalization study had Solano County
9 way down on the list, about 50.

10 But both of them rate Fresno County
11 either one, two or three.

12 Q So there's some discrepancy among the
13 various rating systems it sounds like.

14 A Well, you're looking at different end
15 points and different ways. Again, the
16 hospitalization is a very severe end point, while
17 the UCLA study looked at just the prevalence of
18 asthma, as self reported by individuals during a
19 survey.

20 And so both have their strengths; both
21 have their limitations. And they looked at
22 different end points.

23 Q Let me go on to a different subject. Do
24 you believe in your professional opinion that
25 ambient monitoring of PM10 at a construction site

1 reduces PM10 concentrations?

2 A It can serve to reduce concentrations by
3 insuring that an aggressive dust suppression and
4 particulate suppression program is implemented.

5 Q During your testimony I thought I heard
6 you say that the San Joaquin Valley Hearing Board
7 could modify a District rule, in that case reg 8,
8 I think it was, fugitive dust.

9 Is that really your testimony, or did I
10 mis-hear you?

11 A Well, I think you have a different
12 interpretation of what I said.

13 Q Please explain.

14 A And that's any District rule is subject
15 to a variance by application. And so someone
16 could come in, in this case Calpine, could come to
17 the San Joaquin Hearing Board, Air District
18 Hearing Board, and say here are the following
19 reasons that we can't comply with this particular
20 District rule. And they could, if the findings of
21 the California Health and Safety Code, give you
22 relief.

23 Q Thank you for the explanation. We're
24 talking about a variance then, and actually
25 modifying the rule. So you were suggesting a

1 variance procedure, is that correct?

2 A Yes.

3 Q Okay, thank you.

4 A But it would modify, it would serve to
5 modify the program, the dust suppression program,
6 which is required by the rule.

7 Q Is that automatically granted, the
8 variance?

9 A Oh, no.

10 Q So it's not a discretionary, it's not a
11 simple ministerial act by any stretch, is it?

12 A It is both ministerial and
13 discretionary; it is more discretionary. But once
14 the findings are made, the Hearing Board is under
15 administrative guidance to grant the variance
16 according to the Health and Safety Code.

17 Q So if they can make the showing required
18 by the Health and Safety Code then it can be
19 granted, is that correct?

20 A That's -- yes, it can, and it should be.

21 Q Let me ask you a couple questions. Some
22 of the numbers in your previous testimony got a
23 little jumbled up, and I want to make sure the
24 record's clear.

25 You referred to a value of 0.5

1 mcg/meter, cubic, right, for PM10 for operational
2 impacts. Was that a 24-hour or an annual average?

3 A That was an annual average.

4 Q Okay, and you referred to a value of
5 118, again mcg/cubic meter for PM10 construction
6 impacts. Was that a 24-hour number?

7 A That was 24-hour.

8 Q And that's from the applicant's original
9 analysis, correct, not --

10 A Correct.

11 Q -- the revised analysis? Correct. I
12 think there's some confusion that I want to clear
13 up in the record as it relates to AQC-3 and the
14 Waste-6. So let me ask you a couple questions and
15 see if we can get to the bottom of that.

16 Are you clear that the applicant is not
17 asking for AQC to be deleted in its entirety? C-
18 3, I'm sorry, AQC-3.

19 So, in other words, let me rephrase.
20 Have you seen Mr. Rubenstein's testimony where
21 he's proposed revisions to AQC-3?

22 A Yes, but I'd certainly like to see them
23 again as I'm answering your questions.

24 Q Okay, I think --

25 A I learned that long ago. Don't go by

1 memory.

2 (Laughter.)

3 BY MR. HARRIS:

4 Q Certainly get the document in front of
5 you, but I guess -- it's applicant testimony filed
6 on 2/4/03; it's our group two testimony.

7 MR. FREITAS: Oh, the group two, okay, I
8 don't have that.

9 MR. HARRIS: Yeah, our group two
10 testimony.

11 MR. KRAMER: Does that have a number
12 there?

13 (Pause.)

14 MR. HARRIS: Okay, can we be off the
15 record for just a second, please?

16 HEARING OFFICER WILLIAMS: Yeah, off the
17 record.

18 (Off the record.)

19 BY MR. HARRIS:

20 Q I don't expect you to look at the
21 language, I really was asking a simple question,
22 are you aware that we had not sought to delete the
23 entire condition?

24 A Yes.

25 Q Thank you.

1 A There's not much left, though, but not
2 the entire.

3 Q As long as there's enough. With regard
4 to the relationship between AQC-3 and Waste-6,
5 just so the chronology is correct, I want to see
6 if this jibes with your memory.

7 We filed our testimony on February 4th,
8 the testimony before you, is that correct?

9 A Why don't you ask a question as --

10 Q I just want to confirm your
11 understanding of the chronology here. So my
12 understanding of the chronology is that the first
13 document, our air quality testimony was filed on
14 February 4th, is that correct?

15 A That's correct.

16 Q Then on -- and that testimony included
17 our proposed changes to AQC-3, is that correct?

18 A Yes.

19 Q So that document was before you. Then
20 exhibit 2, I think it's O, it's the staff's
21 response on all issues except noise and air
22 quality. That was filed on February 11th. Do you
23 have a copy of that before you?

24 MR. KRAMER: Let me correct you, though.
25 I think air quality wasn't -- you said except

1 noise and air quality.

2 MR. HARRIS: Correct, but I want to talk
3 about the waste condition, that's why I wanted
4 this document.

5 MR. KRAMER: Okay, but I'm just saying
6 you're mischaracterizing --

7 MR. HARRIS: Not the first time. Thanks
8 for the correction. Sorry about that.

9 HEARING OFFICER WILLIAMS: The copy I
10 have says it was received in dockets on February
11 13th.

12 MR. HARRIS: Okay, it's dated February
13 11th, but may have been docketed on the 13th.

14 MR. KRAMER: Yeah, the day between was a
15 holiday.

16 MR. HARRIS: That's correct, yeah.

17 DR. GREENBERG: Correct.

18 BY MR. HARRIS:

19 Q Can you turn to page 25 of the document.
20 Do you see that?

21 A Yes.

22 Q And do you see there below basically a
23 markup of the applicant's proposed language, is
24 that correct?

25 A Yes.

1 Q Can you read that first statement under
2 Waste-6?

3 A Staff agrees with applicant's proposed
4 changes.

5 Q Okay, so the chronology is then we
6 proposed the changes to AQC-3 that you had in your
7 possession. And then staff agreed to our proposed
8 changes to the Waste-6, is that correct?

9 A No.

10 Q Well, which day did I screw up?

11 A I was first given in January your
12 proposed changes to Waste-6. That came before the
13 proposed changes to AQC-3.

14 Q Well, let's go through the sequence
15 again.

16 A Okay.

17 Q On February --

18 A And the first I knew that you were
19 trying to change AQC-3 was today. Now, whether or
20 not other members of the CEC Staff were aware of
21 that change, I wasn't.

22 Q Okay, let's take -- depersonalize it,
23 then, so --

24 A Okay.

25 Q Sorry. I wasn't suggesting that you

1 knew that, but from the applicant's perspective,
2 let's try it that way, from the applicant's
3 perspective, then, on the 4th we filed our
4 proposed changes; and then on the 11th Waste-6 was
5 accepted. Can you accept that as our
6 understanding of the process? And then we'll --

7 A I don't know what your understanding is.
8 I just know what you had proposed in Waste-6 was
9 hey, don't have to have another monitoring, you
10 know, rather a dust suppression program go with,
11 you know, air quality C-3.

12 Q Okay, I think --

13 A And that's what I agreed to.

14 Q Okay, thank you. Spent more time on
15 that than we need to. Appreciate your --

16 A Thank you.

17 Q -- indulgence. With other projects,
18 power plant projects, do you recommend ambient
19 PM10 monitoring for projects other than CEC
20 projects?

21 A Not only have I recommended it, but I
22 have actually implemented such programs at
23 hazardous waste sites.

24 Q Hazardous waste sites? Were those with
25 downwind monitoring facilities?

1 A Yes.

2 Q And were those to detect PM10?

3 A Yes, and hazardous air pollutants, VOCs
4 and SVOCs.

5 Q Thank you.

6 MR. HARRIS: I may have a couple more
7 for you, but I'm going to move on, if I can, to
8 Mr. Walther. Sorry, I think I threw an "h" in
9 there, it's Walters, is that correct?

10 MR. WALTERS: Okay.

11 MR. HARRIS: Can we be off the record
12 for a second?

13 HEARING OFFICER WILLIAMS: Off the
14 record.

15 (Off the record.)

16 CROSS-EXAMINATION

17 BY MR. FREITAS:

18 Q Dr. Greenberg, --

19 A Yes.

20 Q -- back to Waste-6. On the proposed
21 change you just read into the record, that staff
22 agreed with applicant's proposed changes, but that
23 wasn't the end of the sentence. It wasn't the
24 whole statement.

25 Could you continue on reading with the

1 balance of the statement under Waste-6?

2 A In other words, staff's proposed
3 condition of certification Waste-6 is hereby
4 revised to read?

5 Q Yes.

6 A Okay. You want me to read the entire --

7 Q No, that's not necessary.

8 A Okay.

9 Q I just wanted to note that there was a
10 conditional acceptance. And that the condition is
11 listed. Because it's hereby revised to read. I
12 just wasn't clear on that.

13 On AQC-3, Mr. Rubenstein's testimony
14 suggested that they didn't want to delete the
15 entire AQC-3, but all that's remaining that I can
16 tell is three paragraphs. Is that your -- are you
17 in agreement with that?

18 A I'm in agreement with your statement
19 that the only thing left of -- the only thing that
20 would be left under their proposal would be those
21 three paragraphs.

22 Q Is it your testimony tonight that if
23 this deletion was allowed would there be any other
24 conditions inside any other portions of the air
25 quality conditions that would be covered under the

1 ones that were stricken from AQC-3?

2 A Not in my opinion.

3 Q Would it be your testimony that there
4 would be a necessity to have some conditions
5 represented that would be stricken from this?

6 A It is my testimony that there should be
7 a condition of certification that follows AQC-3,
8 if not verbatim, very closely when it comes to a
9 dust suppression program.

10 Q Is it your opinion that the language
11 could be rewritten that would satisfy both
12 parties? Knowing what you know today?

13 A Well, that's a very hard question to
14 answer because I don't know what will satisfy the
15 applicant at this time. I know what will satisfy
16 me. And I know probably what would satisfy the
17 Air Quality Staff. So that's a very difficult
18 question to answer.

19 Q Mr. Rubenstein made a statement that it
20 represented the intent of the applicant's -- that
21 he represented the applicant's intent of the
22 revisions and the modifications. Based on that
23 intent, is it your understanding that you could
24 write AQC-3 so that both parties can achieve the
25 same intent?

1 A Well, I would hope that we could. I --

2 Q Or a parallel intent? I mean, are there
3 any gaps that can't be bridged?

4 A Well, sir, with all due respect, you're
5 asking me to render an opinion on the mindset of
6 the applicant and their experts, and I don't think
7 I can do that.

8 I think it's been outlined that there
9 appears to be a fundamental difference of opinion
10 as to the nature and the need for a dust
11 mitigation program.

12 Q And certification of that program?

13 A And monitoring to insure that that
14 program is, indeed, effective.

15 Q And the suggested deletions of AQC-3
16 that was presented by Mr. Rubenstein today does
17 not do that? Does not allow for that?

18 A In my view, it does not.

19 Q Okay, thank you. I wasn't really sure
20 today, and maybe you could summarize this for me,
21 what Mr. Rubenstein was talking about regarding
22 particulates in some of his conclusions.

23 Do you have an expert opinion as to some
24 of the conclusions Mr. Rubenstein drew today
25 regarding the particulate issue?

1 A Yes, if you ask me a specific question
2 I'd be happy to give you a specific answer.

3 Q Okay, as to his opinions and conclusions
4 that were drawn from the impact of the
5 particulates from the dust cloud that would trail
6 any moving equipment.

7 A You'll have to refresh my memory. Mr.
8 Rubenstein did make a number of statements. If
9 you can re-ask the question I'll be happy to give
10 you a specific answer.

11 Q I think what I'm trying to get to is I'm
12 trying to target whether or not, in your opinion,
13 the dust clouds, as was represented by Mr.
14 Rubenstein's testimony, would those dust clouds be
15 capable of affecting the operator of that
16 equipment?

17 A I think -- you're jogging my memory. I
18 think you asked the question if someone were on a
19 tractor?

20 Q Right.

21 A And was tilling the soil and generating
22 a dust cloud from the actual disking or tilling of
23 the soil. The soil contained some contaminants.
24 And if you are asking the question of would the
25 health of the farmer be impacted from the

1 particulate matter, in other words the dust cloud,
2 as well as any contaminants that might be in the
3 soil, then I can answer that question.

4 Q That's a good analogy, but let's trade
5 places of the tractor disking to a paddle wheel
6 moving dirt off the surface of the proposed
7 construction site.

8 A A paddle wheel?

9 Q Well, a piece of equipment, a large
10 piece of earth-moving equipment that peels the
11 dirt off the surface as it's grading the surface
12 of the dirt.

13 A A grader.

14 Q A grader.

15 A Right. Let me tell you that there is
16 more than adequate data in the scientific
17 literature, as well as in USEPA documents, to
18 demonstrate that earth-moving activities of the
19 nature that you're talking about do indeed
20 generate clouds of dust that are both visible and
21 nonvisible, that contain particulate matter of 10
22 microns or less.

23 And that it will impact. We don't know
24 the level of the impact, but it will impact on the
25 health of both the operators of that equipment

1 and/or the offsite public.

2 Now, the operators of such equipment,
3 for the most part in modern day equipment, may not
4 be impacted because of the use of what are termed
5 environmental cabs.

6 Q Right.

7 A And so the worker is often very well
8 protected from those dust clouds. I don't know of
9 too many heavy equipment operators now that do not
10 use environmental cabs.

11 Q I was going to lead into that. That was
12 my next lead question, the effect of those
13 environmental cabs on that.

14 To your knowledge have any studies been
15 done site-specific to the City of San Joaquin and
16 the impact area regarding incidence of asthma or
17 what the impacts those particulates would have
18 from the construction site to the asthmatics, or
19 asthma sufferers in the area?

20 A No, I'm not aware of any specific
21 studies for the town of San Joaquin. In fact,
22 it's very difficult to get that data even for
23 larger cities and towns. It does exist, but not
24 for towns as small as San Joaquin.

25 Q When you testified -- I believe it was

1 you, the human element versus having a machine do
2 monitoring.

3 A Correct.

4 Q Was that you? Was it your testimony
5 that the monitoring system would be onsite? The
6 machine onsite?

7 A Yes, onsite and the fenceline.

8 Q Within or outside or both?

9 A Well, at the fenceline usually means
10 just that, at the fenceline. Whether it's one
11 foot outside or one foot inside, --

12 Q Right.

13 A -- but the upshot of it, the bottomline
14 is that you want to measure upwind and downwind.
15 And you want to make sure that your downwind
16 particulate matter concentrations are not greater
17 than your upwind concentrations.

18 You don't want to penalize the site by
19 not measuring upwind because there could be
20 particulate matter coming from another source.
21 But likewise, you want to insure that the source
22 is not adding to the upwind concentration so that
23 you've got a lot more downwind.

24 Q Then that would require two monitors?

25 A A minimum of two. Depending on the

1 site, the site activities, you might want to have
2 three; you might want to even have four.

3 Again, the applicant does have some
4 experience in setting up a program and
5 implementing the program. At a previous hearing
6 on another location where they did indeed conduct
7 this monitoring, I provided examples from USEPA
8 documents on how to set up such a monitoring
9 program, where to set up the monitors, et cetera.

10 Q Did that program show an effective use?
11 Did it have an effective use? I mean did it
12 measure or monitor any drift or any particulate
13 matter that needed to be monitored? Or did it
14 prove to be unnecessary?

15 A No, there were results from that site.
16 And the staff is currently evaluating those
17 results. And I'm aware of one staff member in
18 particular that has concerns over the
19 implementation of that particular monitoring
20 program.

21 Q Do you consider this an overly burdening
22 condition on the applicant?

23 A No, I do not.

24 Q If I might stray just a little bit, if
25 I'm allowed by Mr. Williams, because off the

1 record we had a discussion and I think there was a
2 misunderstanding. And I wanted to make sure that
3 Dr. Greenberg had a clear understanding of one of
4 the facility designs that I kind of had a
5 misunderstanding about. And I wanted to clear it
6 up, if it's okay, if I could stretch there. It
7 would be one simple question of subject, and it
8 won't be elaborate at all.

9 HEARING OFFICER WILLIAMS: Go right
10 ahead.

11 BY MR. FREITAS:

12 Q You and I were talking off the record
13 and we discussed the potential of off-ponding or
14 ponding the treated water onsite. And allowing it
15 to either leach or be entered back into the
16 system, the groundwater, or the ground. Or would
17 that be a lined pond? Was that your understanding
18 that there was a pond that would be ponding or --

19 A I believe our conversation grew out of a
20 question that you had asked the applicant's public
21 health expert, Dr. John Lowe, which he couldn't
22 answer. And that was on whether or not there was
23 any potential for DBCP to end up in the reclaimed
24 water that was then going to be used in the
25 cooling tower, which I gather you were fearful or

1 concerned, rather, then that that would distribute
2 airborne DBCP in the community as the cooling
3 water was used.

4 I believe I mentioned to you that I was
5 unaware of any wastewater reclamation project that
6 didn't use lined ponds. However, in this
7 particular case I understand that the Fresno/
8 Clovis wastewater treatment facility, in the
9 process of treating or reclaiming the wastewater
10 and treating it to tertiary treatment, which would
11 then be used as a source of cooling water for this
12 project, generates a small amount of wastewater,
13 itself. And that it does use a percolation pond
14 to allow that small amount of wastewater to be
15 filtered by the soil. It then goes down into
16 groundwater, and that, itself, is extracted and
17 reclaimed and sent through the wastewater
18 treatment process. So that it could make up a
19 certain portion of the water.

20 And I think that's the answer to your
21 question, that some small part of the source of
22 the wastewater that is being treated would come
23 from that onsite, that's not the facility site,
24 but rather the wastewater treatment plant which is
25 20 miles that way, could, indeed, come through the

1 soil.

2 Q But it has no measurable impact on this
3 process or the --

4 A Correct. In order to meet Title 22
5 guidelines of tertiary treated water, to be
6 allowed to be used as cooling tower water, it has
7 to be tested. And one of the tests would be for
8 pesticides. And they would have to let everybody
9 know if they found any DBCP.

10 MR. FREITAS: No more questions.

11 HEARING OFFICER WILLIAMS: Applicant, do
12 you have anything further?

13 MR. HARRIS: For Dr. Greenberg?

14 HEARING OFFICER WILLIAMS: Yes.

15 MR. HARRIS: Yeah, I think I have one
16 more question.

17 CROSS-EXAMINATION - Resumed

18 BY MR. HARRIS:

19 Q You indicated in your response to Mr.
20 Freitas that if AQC-3 was amended as proposed by
21 the applicant there wouldn't be much left related
22 to dust mitigation, is that correct?

23 A Yes.

24 Q Is it your conclusion, then, that
25 conditions AQ-111 to 117 proposed by the District

1 and the staff constitute not much as it relates to
2 dust mitigation?

3 A AQ --

4 Q 111 to 117.

5 MR. KRAMER: I guess I have to object
6 based on my experience that this is going beyond
7 the scope of the direct, or even the last cross.

8 HEARING OFFICER WILLIAMS: Applicant?

9 MR. FREITAS: I think you made that
10 ruling against me earlier, Mr. Williams.

11 HEARING OFFICER WILLIAMS: Do you --
12 you're not going to withdraw the question?

13 (Laughter.)

14 MR. HARRIS: No. No, you know, you can
15 rule against me if you'd like.

16 HEARING OFFICER WILLIAMS: Okay. You're
17 excused, Dr. Greenberg. And thank you.

18 ASSOCIATE MEMBER GEESMAN: Have a good
19 flight back.

20 MR. HARRIS: Have a bigger dinner next
21 time so you're sleeping.

22 (Laughter.)

23 HEARING OFFICER WILLIAMS: You may
24 continue with your cross-examination.

25 MR. HARRIS: Thank you, appreciate that.

1 I'm going to bounce around back and forth between
2 a couple of documents that I have, Will, so I
3 apologize if it takes me some time to get my
4 questions together.

5 CROSS-EXAMINATION

6 BY MR. HARRIS:

7 Q Mr. Walters, are you ready to proceed?
8 I want to talk to you about construction --

9 HEARING OFFICER WILLIAMS: Excuse me.

10 MR. KRAMER: I'm sorry, Mr. Greenberg
11 thinks you may be bringing up another topic a
12 little later that he may need to be here for. So
13 let me ask -- can we go off the record?

14 HEARING OFFICER WILLIAMS: Sure, go off
15 the record.

16 (Off the record.)

17 HEARING OFFICER WILLIAMS: Well, staff
18 needs to introduce its public health testimony.

19 MR. KRAMER: Normally they would go
20 first. And I guess all they want to do is propose
21 a modification of the one condition, right?

22 MR. HARRIS: I guess what I'd do is
23 introduce our testimony by declaration, and then
24 have Mr. Rubenstein describe the public health-1.
25 And then turn it back to you. Does that make

1 sense?

2 MR. KRAMER: Okay.

3 HEARING OFFICER WILLIAMS: Okay.

4 MR. KRAMER: Do you have that on a piece
5 of paper?

6 MR. HARRIS: Have what?

7 MR. KRAMER: This condition.

8 MR. HARRIS: Oh, no, I'm sorry. It's
9 only on the computer.

10 HEARING OFFICER WILLIAMS: Mr. Lowe --
11 the public health testimony was already put in the
12 record for Mr. Lowe.

13 MR. HARRIS: That's correct, all right.
14 So we already have Mr. Lowe's public health
15 testimony in the record.

16 Mr. Rubenstein has a proposed revision
17 to public health-1. This condition was developed
18 with the applicant and staff on the Inland Empire
19 case. I would like Mr. Rubenstein to read that
20 proposed language. And then ask that Dr.
21 Greenberg have a chance to respond.

22 MR. FREITAS: Do we have the document?
23 We don't?

24 (Pause.)

25 MR. RUBENSTEIN: I'll just read the

1 screen. We're getting a little crowd here.

2 DIRECT TESTIMONY

3 MR. RUBENSTEIN: The condition, the
4 revised condition of public health-1 would read as
5 follows, quote:

6 The project owner shall develop and
7 implement a cooling tower biocide use and
8 monitoring program to insure that the potential
9 for bacterial growth is kept to a minimum. The
10 biocide use and monitoring program shall
11 incorporate, as applicable, the best practices and
12 recommendations for minimization of risks
13 associated with Legionella, as outlined in the
14 Cooling Tower Technology Institute February 2000
15 publication titled, "Legionolosis Guideline Best
16 Practices for Control of Legionella."

17 The biocide use and monitoring program
18 shall specifically address full- and part-load
19 plant operation and short- and long-term
20 shutdowns.

21 The verification that we would propose
22 to go along with that condition would read, quote:
23 At least 60 days prior to the commencement of
24 cooling tower operations the cooling water
25 management plan shall be provided to the CPM,

1 close quote.

2 The language of the condition, itself,
3 we developed with Dr. Greenberg in the Inland
4 proceeding. That proceeding has not yet advanced
5 far enough to have a staff assessment, so this was
6 something that came up at a workshop early on that
7 we worked through. We had not developed the
8 verification language. The verification language
9 is our proposal, but the staff has not -- we've
10 not had any discussions with the staff about
11 verification.

12 It's just been brought to my attention
13 that the -- in the revision between one draft and
14 the next I should clarify the verification. The
15 verification should read, at least 60 days prior
16 to the commencement of cooling tower operations
17 the biocide use and monitoring program shall be
18 provided to the CPM. I used the incorrect or
19 inconsistent titles between the condition and the
20 verification.

21 MR. HARRIS: So that last change just
22 makes the verification consistent with the actual
23 language of the condition.

24 MR. KRAMER: Shouldn't the verification
25 say for review and approval?

1 DR. GREENBERG: I believe it should.

2 HEARING OFFICER WILLIAMS: Let me ask
3 you this. Is that contained anywhere in writing
4 in your testimony? Or is this something that
5 hasn't been reduced to writing yet?

6 MR. RUBENSTEIN: It is not in my
7 testimony. I put this together today based on my
8 notes from the Inland Empire hearing.

9 HEARING OFFICER WILLIAMS: Well, why
10 don't we mark it as --

11 MR. FREITAS: Wait a minute, I'm going
12 to have to form an objection. I mean this wasn't
13 pre -- it wasn't pre-disclosed.

14 HEARING OFFICER WILLIAMS: Let me
15 finish. Can I finish, please?

16 MR. FREITAS: Okay.

17 HEARING OFFICER WILLIAMS: Why don't we
18 get it reduced to writing. We'll mark it as 4A-54
19 for identification. And everybody will have a
20 chance to look at it, and we'll come back to it.
21 Okay?

22 MR. HARRIS: Okay.

23 HEARING OFFICER WILLIAMS: I think we
24 have the parties' understanding that it was a
25 mutually agreed upon language, at least between

1 staff and applicant. We'll draft it, have Mr.
2 Freitas take a look at it, and we'll revisit it.
3 Okay?

4 MR. KRAMER: Right. And it is a
5 response to something we floated in our February
6 11th reply to them. So it's certainly not out of
7 the blue.

8 MR. FREITAS: Can we then make a -- can
9 I then make a request to have 2Q entered in as a
10 document?

11 HEARING OFFICER WILLIAMS: 2Q is already
12 in.

13 MR. FREITAS: Oh, 2Q is already accepted
14 in?

15 HEARING OFFICER WILLIAMS: Yes.

16 MR. FREITAS: Oh, I'm sorry, I thought
17 you guys rejected that.

18 HEARING OFFICER WILLIAMS: No.

19 MR. FREITAS: I apologize.

20 HEARING OFFICER WILLIAMS: No, 2Q is in.

21 MR. FREITAS: I apologize.

22 HEARING OFFICER WILLIAMS: Okay.

23 DR. GREENBERG: Mr. Williams, if I
24 may, --

25 HEARING OFFICER WILLIAMS: Okay.

1 DR. GREENBERG: -- because they're
2 substantively the same staff does not have any
3 objection, except wishes to make two points.

4 One, I believe that review and approval
5 needs to be in there. I believe that's in Inland,
6 as well. And if not, that was a typographical
7 error. And I thank you for pointing that omission
8 out. But in all of our verifications whenever you
9 submit a document to the CPM it's always for
10 review and approval. So if you'll add that in,
11 certainly staff will agree with that.

12 And second of all, I wish to let you
13 know that we are working on a model biocide
14 monitoring program that should be available in a
15 couple of weeks. And that should you decide to
16 follow that program, as opposed to the CTI, the
17 Cooling Technology Institute's program, you can be
18 assured of getting approval of the CPM.

19 HEARING OFFICER WILLIAMS: Okay. All
20 right, so we'll do that. If you could have a copy
21 of it, at some point, and we can either fax it or
22 email it to Mr. Freitas. And we'll deal with it
23 at that point.

24 Okay. Now, I take it staff, you need to
25 introduce --

1 MR. KRAMER: Right.

2 HEARING OFFICER WILLIAMS: -- the public
3 health --

4 MR. KRAMER: Dr. Greenberg is already
5 sworn.

6 DIRECT EXAMINATION

7 BY MR. KRAMER:

8 Q Dr. Greenberg, did you prepare the
9 public health section of the staff assessment and
10 the addendum?

11 A Yes.

12 Q And did you also prepare the public
13 health portion of the response that was filed on
14 February 11th, commonly known as exhibit 20, as in
15 Oscar?

16 A Yes.

17 MR. HARRIS: We're willing to stipulate
18 to the Doctor's qualifications and his preparation
19 of the documents.

20 MR. KRAMER: Okay. And I don't think
21 there's any reason for him to summarize his
22 testimony, either, is there? So we will offer him
23 for cross-examination by Mr. Freitas.

24 CROSS-EXAMINATION

25 BY MR. FREITAS:

1 Q Dr. Greenberg, as we discussed earlier,
2 we talked about the reverse osmosis system being
3 able to filter out the DBCPs, if any there were,
4 which we're not claiming there are. But just bear
5 with me as a layperson who doesn't have any
6 experience with these systems, that detail like
7 you guys do, why wouldn't it take out the
8 Legionella bacteria, also? Or does it grow, does
9 the Legionella grow after that portion of the
10 process?

11 A I'm not aware that RO, that stands for
12 reverse osmosis, could remove Legionella bacteria,
13 but it would be a moot point anyway because what
14 you just stated that the Legionella bacteria can
15 indeed grow in any standing body of water, given
16 the right nutrients and the right temperature
17 range.

18 And so even if it were present in
19 reclaimed water and were removed by RO, it could
20 grow again in the 20 miles of pipeline, or it
21 could grow in the cooling tower recirculating
22 water, the basin water on the cooling tower, et
23 cetera. It could; I'm not saying that it will.

24 Q Right. How about in the half-a-million
25 gallon storage tank of the graywater, or the

1 recycled water?

2 A I think that the answer to that question
3 is that Legionella bacteria are ubiquitous in our
4 environment. It can grow anywhere given the right
5 temperature range and the right nutrients. It
6 doesn't like low temperatures; it doesn't like
7 high temperatures. And we've identified the
8 temperature range where it will optimally grow,
9 and above which it won't, and below which it
10 won't.

11 And certainly the presence of chlorine
12 will prevent its growth.

13 Q It's an acceptable rate or use of
14 chlorine, in other words, not such an excessive
15 rate that would be necessary that would then
16 create a chlorine over-abundance in the
17 environment?

18 A You're quite right. The residual
19 chlorine range would actually be less than a part
20 per million to optimally guard against Legionella,
21 as well as other microbial growths in the cooling
22 tower water.

23 The local swimming pool is somewhere
24 between 1 and 3 parts per million residual
25 chlorine. So it would be less than the swimming

1 pool you allow your kids to go into.

2 Q In section, the section of project
3 operation in Legionella, the bottom of -- the
4 middle paragraph it states that, with biocides to
5 minimize the growth of Legionella and other micro-
6 organisms. Could you identify just briefly maybe
7 some of the top other micro-organisms that would
8 be of concern?

9 A Off the top of my head, no, I'm sorry, I
10 can't.

11 Q Were they identified in a written
12 document anywhere?

13 A Yes. In an extensive bibliography, but
14 I wasn't focusing on the names of the other micro-
15 organisms.

16 Q Would they be of insignificant value?

17 A Well, the only significance would be
18 that some of these organisms, like such as some
19 protozoa and you know, some other micro-organisms,
20 can exist as a biofilm on the surface of -- inside
21 surface of pipes. And this biofilm then can also
22 protect the Legionella bacteria from the biocide.
23 And that's why there should be multiple biocide as
24 well as anti-fouling and anti-biofilm agents used
25 as part of a cooling water treatment program.

1 And this is outlined by the CTI, that's
2 the Cooling Technology Institute, protocol, as
3 well as will be outlined and discussed in our
4 staff protocol.

5 Q And does that environment exist in
6 stainless steel pipe, also?

7 A Yes, it would. Or could.

8 Q Do you know what staff meant when they
9 used the word finally a proprietary non-oxidizing
10 biocide must be available onsite for direct feed
11 into the circulating water system to control
12 algae? I don't understand proprietary.

13 A A proprietary name is a brand name such
14 as Nalco --

15 Q In this context, anyway -- okay.

16 A Give you an example. Facial tissue, the
17 proprietary name, a brand name is Kleenex. Okay.
18 In this case a non-oxidizing biocide, a
19 proprietary name would be like Nalco makes one.
20 And that is listed as being proposed for use by
21 the applicant. And you can find that in the
22 hazardous materials section.

23 Q So there is a list of the suggested
24 proprietary biocides?

25 A Yes.

1 Q Are those a conditional use? Or a list,
2 or can they make their own choice?

3 A No, it is a list that is attached to the
4 hazardous materials management section which I
5 authored. It comes from the applicant. It's part
6 of the AFC. There is a condition Haz-1 that
7 requires that they use only those chemicals that
8 they, themselves, have identified, in the
9 strengths and quantities that they, themselves,
10 have identified.

11 Q That are acceptable to staff?

12 A Yes, because we have reviewed and
13 evaluated those chemicals and found that they are
14 proposing to use them, store them, transport them
15 in a safe manner.

16 MR. FREITAS: That's all.

17 HEARING OFFICER WILLIAMS: Okay. I
18 think maybe we can --

19 DR. GREENBERG: No I can go.

20 (Laughter.)

21 HEARING OFFICER WILLIAMS: -- release
22 him safely now. Thank you, Dr. Greenberg.

23 ASSOCIATE MEMBER GEESMAN: Don't say
24 anything on your way out.

25 (Laughter.)

1 HEARING OFFICER WILLIAMS: We appreciate
2 it. Do you want to continue with your cross-
3 examination?

4 MR. HARRIS: Yes, if I could.

5 HEARING OFFICER WILLIAMS: Okay.

6 CROSS-EXAMINATION - resumed

7 BY MR. HARRIS:

8 Q Mr. Walters, I want to talk about
9 construction modeling and specifically about the
10 met data, meteorological data, I'll call it met
11 data.

12 You modified the met data received by
13 the applicant prior to your use of the data, is
14 that correct?

15 A I modified the data after some initial
16 use of the data.

17 Q And what were the reasons for these
18 modifications?

19 A Initially I identified CO one-hour
20 impacts and NOx one-hour impacts. They were
21 extremely high. Higher than I had modeled in any
22 other case. Without having emissions being any
23 higher than I'd modeled in other cases.

24 So, I investigated the cause. And as I
25 identified previously the cause was the fact that

1 we were seeing high wind speeds under stable
2 conditions in certain hours of the data. And
3 essentially all of the high results were based on
4 that data.

5 Now, in review of that data I went
6 through -- exhaustively through the 48,000. I
7 determined if and when those conditions were due
8 to data filling to calm. And then I interpolated
9 a fill based on wind speeds prior to and up to
10 those wind speeds, so that instead of, for
11 example, going from a G stability class down to an
12 F, the PCRAMETTE does not allow more than a one
13 stability class change than the stability class
14 would have already been by that time, because it
15 would have had a higher wind speed at a D. And so
16 the next hour, which is the hour of concern, would
17 also have a D stability class.

18 Q Now these changes to the met data you
19 made, were they consistent with the EPA guidance
20 for the preparation of met data for modeling use?

21 A They would be consistent with the fill
22 approaches for missing data. There are a number
23 of different ways that you can fill missing data.

24 Q Specifically, were your changes, the
25 changes you made, consistent with the EPA guidance

1 regarding I think it's PCRAMETTE you said, dealing
2 with missing values for wind speed and class
3 stability?

4 A The only fill that I actually did was
5 wind speed.

6 Q Okay, so let me ask the question again.
7 Were your changes consistent with the EPA guidance
8 program for PCRAMETTE dealing with missing values?

9 A As far as I'm aware, yes, they were.

10 Q Can you explain the changes you made and
11 how they're consistent with the PCRAMETTE?

12 A I don't have the PCRAMETTE guideline
13 with me, so, no, I can't.

14 Q Okay. In your testimony you concluded
15 that the project's construction impacts would
16 cause a new violation of the state ambient air
17 quality standards for NO2 and PM10, is that
18 correct?

19 A Excuse me, could you reference the place
20 in the assessment?

21 Q If you give me a moment. Let's try 4.1-
22 38.

23 A And can you restate the question,
24 please?

25 Q Yes. In your testimony you concluded

1 that the project's construction impacts would
2 cause new violations of state air quality
3 standards for NO2 and PM10, is that correct?

4 I'm looking specifically at the table on
5 the top of 4.1-38.

6 A I think -- yeah, table 23, which didn't
7 get paginated quite right.

8 Q Correct.

9 A The implication of a new violation was
10 identified for NO2 using NOx OLM, but then was
11 later discounted in the testimony considering the
12 fact that the project impact and background levels
13 were not the same hour.

14 Q Okay, but that table 23 does show a
15 percent of standard for NO2 at 102, PM10 at 660,
16 is that correct?

17 A Right. The classification of a new
18 violation for PM10 is, I think, inconsistent with
19 our text where we identify that it would
20 exacerbate existing violations.

21 Q Does your analysis rely on the
22 information contained in the applicant's August 9,
23 2002 revised analysis of construction impacts? It
24 did not, isn't that correct?

25 A That's correct, for the reasons I

1 indicated before, we didn't feel that that
2 emission estimate was defensible.

3 Q If your analysis had reached the same
4 conclusion as the applicant's August 9th analysis
5 regarding air quality impacts, would you have
6 changed your recommendations regarding
7 construction mitigation measures?

8 A If I came up with the same data, and the
9 data that I used actually was on table 22 for my
10 findings, not table 23. And came up with the same
11 values, which are essentially very similar to my
12 values in table 22. Yes, my findings would have
13 been the same.

14 I did not base my impacts on the 24-hour
15 modeling. The 24-hour modeling was done for two
16 purposes. Well, it was done initially for one
17 purpose, it was done for a condition that we had
18 in the initial staff assessment. It was going to
19 limit construction to certain hours of the day.

20 However, when I was able to get together
21 with the noise people and saw their condition, it
22 was limiting, we didn't need two conditions. That
23 condition was good. We dropped that condition,
24 which, at the time, I believe was AQC-7.

25 And that modeling and this data was in

1 support of that condition. And it remains in the
2 report in support of noise-6 or 8, I can't
3 remember which one it is.

4 Q So let me see if I can be a little
5 clearer with my question. If you had reached the
6 same conclusion that we reached, that basically
7 that there wasn't a violation, didn't go over 102,
8 didn't get the 660. If you'd reached that same
9 conclusion, would you have changed your
10 recommendations regarding construction mitigation
11 measures?

12 A I already assumed that it didn't go up
13 to 102, and my construction mitigation measures
14 are not addressing NO2 impacts.

15 Q So you'd recommend the same construction
16 mitigation measures whether or not the project was
17 projected to cause a violation of air quality
18 standards?

19 A I actually didn't finish my statement.

20 Q Go ahead and finish, please.

21 A For PM10 in order for me to make a
22 determination that we did not need aggressive
23 enforcement, which our enforcement is essentially
24 self-policing with the monitoring of the dust
25 mitigation requirements, I would need to see

1 substantially lower impact results than what we
2 showed, or than what the August 9th submittal
3 shows in the tables of that submittal.

4 Q You've worked on a number of CEC
5 projects, is that correct?

6 A Quite a few.

7 Q Okay, assuming for the moment that the
8 applicant's August 9th modeling results were
9 correct, do you have that assumption in mind?

10 A (No audible response.)

11 Q Assuming they were correct, were these
12 results higher than, lower than, or comparable to
13 the air quality impacts you've seen from project
14 constructions for other projects?

15 A I'd be going on memory. They're
16 probably not an order of magnitude higher or a
17 magnitude lower. They might be higher than some
18 and lower than others based on the emission
19 estimates.

20 Q So, comparable to, perhaps?

21 A Perhaps.

22 Q In the FSA you recommended that the
23 Commission require the use of diesel particulate
24 soot filters on all combustion engines at 100
25 horsepower or larger, is that correct?

1 A That's correct. Essentially that's a
2 pass-through from the new condition that was
3 identified for East Altamont and is in the PMPD
4 for East Altamont.

5 Q So are you aware of any other projects
6 other than the Altamont project for which that was
7 required?

8 A Actually, I'd have to say with the and
9 condition for -- you mean for soot filters, in
10 general?

11 Q Hundred horsepower or larger.

12 A They required soot filters?

13 Q Um-hum.

14 A Yes, the Tracy case.

15 Q Okay, we'll get to the Tracy case in a
16 moment. In the FSA you recommended the applicant
17 upwind and downwind monitoring for PM10 during
18 construction, isn't that correct?

19 A That is correct.

20 Q Are you aware of any other Commission
21 projects that have been required such an upwind/
22 downwind monitoring?

23 A Los Esteros. And there's a potential
24 for Russell City.

25 Q Please describe that potential, because

1 I've worked on that case and I don't recall.

2 A I believe, depending on the findings in
3 the Los Esteros case, that monitoring may be
4 required.

5 Q For Russell City. So the Russell City
6 condition is to look at the results of the Los
7 Esteros demonstration project, is that correct?

8 A To the best of my understanding.

9 Q Okay, it's not to do upwind/downwind
10 monitoring. It's to evaluate the analysis of Los
11 Esteros?

12 A Well, it's to evaluate the analysis to
13 determine if upwind/downwind monitoring is
14 necessary.

15 Q Okay, but strictly speaking there isn't
16 a condition that requires upwind/downwind
17 monitoring in Russell City, is that correct?

18 A Not definitively, but it could.

19 Q Okay, we'll take definitively, thank
20 you. Are there any others that you're aware of
21 besides the Los Esteros project and the -- that
22 required the upwind/downwind?

23 A Not on projects that went to fruition.
24 There were some projects that would have required
25 that if they wouldn't have been taken out prior.

1 Q Did you review any of the reports
2 submitted as a result of the Los Esteros
3 demonstration project?

4 A Yes, I did.

5 Q What do you conclude from the Los
6 Esteros demonstration project?

7 A Essentially there were two main
8 conclusions. Number one, when the meters were
9 cleaned and zeroed we were seeing some pretty high
10 impacts. However, the problem was that the meters
11 were not cleaned and zeroed daily and essentially
12 the dirt on the meters and the zero drift
13 essentially caused all the meter data to go
14 straight up until they were cleaned and zeroed.
15 And they go straight up, cleaned and zeroed,
16 straight up, cleaned and zeroed.

17 Essentially the program, to a great
18 extent, failed because of the implementation of
19 it.

20 But there were certain days after they
21 were cleaned and zeroed where the data was
22 reasonable. But it was a very limited set.

23 Q Overall the program failed, though, is
24 that your characterization?

25 A Due to it's implementation, but not due

1 to the fact that it inherently would have failed.

2 Q Did you attempt to quantify the
3 additional PM10 reductions achieved at the Los
4 Esteros demonstration project?

5 A No. I only looked at the results from
6 the monitors.

7 Q Why not?

8 A All I was asked to do by the CEC was
9 look at the results from the monitors and comment
10 on it.

11 Q Were you aware with Los Esteros that the
12 CEC Staff proposed monitoring only after the
13 applicant had indicated that construction would
14 take place 24 hours a day, seven days a week?

15 A I wasn't involved in that case at that
16 period of time in air quality capacity. So I
17 can't answer that question.

18 Q Okay, thank you. Let me ask you then
19 were you aware. Were you aware that the staff had
20 indicated during Los Esteros hearings that the
21 monitoring was being proposed because certain
22 earth-moving activities would take place during
23 nighttime hours, when dispersion conditions are
24 poor, and it would be difficult to observe plumes?

25 A For the same reason I'm not aware,

1 because I wasn't involved in the case.

2 Q Do you know whether the applicant in
3 this case is proposing to conduct earth-moving
4 activities during nighttime hours?

5 A They would be in terms of the
6 availability of doing earth-moving, it could
7 start, based on the noise requirement, at 6:00
8 a.m., which could allow at least in certain winter
9 hours, at least two hours before significant
10 sunrise and better dispersion.

11 Q I want to talk a little bit about dust
12 suppression. You referred in your testimony to an
13 evaporation rate of 90 inches per year in
14 critique-ing the applicant's analysis.

15 What reference document were you using
16 to determine that value?

17 A I used both the applicant's reference
18 and the AP42, which uses the same chart, which is
19 more legible.

20 Q Can you give me a document and a page
21 number for that reference?

22 A AP42, yes.

23 MR. KRAMER: Do you want to go off the
24 record for a second?

25 (Pause.)

1 MR. WALTERS: Can we go off the record?

2 HEARING OFFICER WILLIAMS: Off the
3 record.

4 (Off the record.)

5 HEARING OFFICER WILLIAMS: The Committee
6 has decided that we're going to complete air
7 quality tonight; pick up at 1:00 tomorrow in
8 Sacramento on the noise topic. And a continuation
9 after tomorrow's hearing will be to Friday at
10 1:00, also in Sacramento, where we expect to pick
11 up on the visual topic and complete our hearing on
12 the San Joaquin Energy Center on Friday in
13 Sacramento.

14 Okay, with that, I guess, applicant, are
15 you prepared to -- and we also expressed our
16 appreciation for Dr. Priestley's patience in
17 staying here all day with the expectation that we
18 would do visual today. We appreciate that.

19 MR. HARRIS: Should I proceed?

20 HEARING OFFICER WILLIAMS: Yes.

21 BY MR. HARRIS:

22 Q Mr. Walters, in your oral testimony
23 today you critiqued the dust suppression issue.
24 You talked about evaporation rates, water
25 application rates of 500,000 gallons a day. You

1 talked about a moisture content. And you talked
2 about equipment load factors.

3 Is any of that discussion in your
4 written prefiled testimony?

5 A No, it's not.

6 Q Thank you. You indicated that the
7 applicant did not supply adequate detail to
8 support the August 9, 2000 assumptions, prior to
9 publication of the staff assessment addendum.

10 Did you ask the applicant for any
11 additional details?

12 A No.

13 Q In fact, that document arrived on August
14 9, 2002, isn't that correct?

15 A After the staff assessment.

16 Q And after that August 9th date staff
17 promulgated additional data requests on a
18 different subject. There were four data requests
19 promulgated on November 1, 2002. Do you remember
20 that?

21 A Yes, I do.

22 Q And --

23 A And you did not answer those questions
24 at that time.

25 Q Because they were objectionable. My

1 question then is if you saw fit to promulgate
2 additional data requests on November 1, 2002, you
3 received our supporting document on August 9,
4 2002, isn't it correct that you could have asked
5 some additional data requests on the August 9th
6 document?

7 A I could if I felt it was warranted.

8 Q Why was it not warranted if you felt
9 that the staff assessment -- in the staff
10 assessment you indicated that you didn't have
11 enough detail to critique the applicant's August
12 9, 2000 assumptions. Were you in any way
13 constrained to not ask additional data requests
14 after you received the August 9, 2000 document?

15 A In terms of being constrained, to some
16 degree I was constrained. I was generally told to
17 go with what I had at that time, and not provide
18 any more data requests.

19 Q Okay, thank you. You indicated that
20 without AQC-5, the construction dust mitigation
21 requirements were just paper. Do you recall
22 saying that?

23 A Excuse me, I didn't catch the last part?

24 Q You stated, I believe, that without AQC-
25 5 the construction dust mitigation requirements

1 were just paper. Do you recall saying that?

2 A Right, without any determination of
3 compliance with the requirements, they don't mean
4 that much.

5 Q Did the CEC Staff require PM10
6 monitoring during construction during the La
7 Paloma project?

8 A I'm not aware if they did or didn't.

9 Q Do you have any reason to believe that
10 construction dust mitigation was not effective at
11 La Paloma?

12 A I have no reason to believe it was or
13 wasn't.

14 Q Did the CEC Staff require PM10
15 monitoring during construction for High Desert?

16 A I would have to answer the same way; I
17 wasn't involved in that case. So, no, I don't
18 know yes or no.

19 Q Thank you. Do you have any reason to
20 believe that the construction dust was any
21 different at High Desert?

22 A No, the setting would be different.

23 Q Did the staff require PM10 monitoring
24 for the Moss Landing project during construction?

25 A Again, I don't know that case.

1 Q That's fine. And do you have any reason
2 to believe the construction dust mitigation was
3 not effective at Moss Landing?

4 A Again, I have no way of knowing yes or
5 no.

6 Q Let's try one more. How about
7 Mountainview, did the staff require PM10
8 monitoring during construction at Mountainview?

9 A It's a case I wasn't involved with for
10 air quality.

11 Q Do you have any reason to believe that
12 it was not effective at Mountainview?

13 A Again, I have no way of knowing yes or
14 no.

15 Q Did you visit the Los Esteros site
16 during the construction to see how effective the
17 onsite monitoring program was going?

18 A I did not, personally, no.

19 Q You indicated that the offset tracking
20 system is new and unproven. Does that mean it's
21 new to you or do you believe that no agency in
22 California has implemented such a system before?

23 A I mean it's new to this agency.

24 Q This agency being the Commission?

25 A Being San Joaquin County Air Quality.

1 Q Are you aware the San Joaquin District
2 has had already prepared one annual tracking
3 system report covering the first year after August
4 of 2001?

5 A No, I haven't seen such a report.

6 Q And are you aware of any other districts
7 that have implemented similar tracking systems?

8 A No, I'm not.

9 Q Let me change the subject and go to the
10 Pastoria issue that has been raised. Have you
11 seen the December 16, 2000 letter from Mike
12 Argentine to Dave Warner of the Air District
13 related to reallocations of the ERCs between the
14 San Joaquin project and Pastoria?

15 A Yes, I have.

16 Q Is it your issue then that you don't
17 believe that constitutes adequate notification of
18 the CEC?

19 A I believe it means it hasn't gone
20 through a formal process of public notification.

21 Q Okay, let me be more direct. Are you
22 confused about the ERC situation? As to which
23 ERCs are allocated to Pastoria versus this
24 project?

25 A No.

1 Q Okay, so you're clear on which ERCs are
2 being used for which project, is that correct?

3 A I'm clear. The record is not clear.

4 Q So your issue is that you believe an
5 amendment is required as opposed to just
6 notification, is that correct?

7 A That is correct.

8 Q Thank you. You indicated that a review
9 of ERC changes would include a CEQA review
10 analysis, is that correct?

11 A Our basic document is a CEQA-equivalent
12 document, so, yes.

13 Q And that's in addition to the LORS
14 review of ERC changes, is that correct?

15 A Yes, it is.

16 Q What are the elements of the CEQA review
17 of an ERC exchange in which, for example, 100 tons
18 of NOx ERCs from one source are replaced with 100
19 tons of NOx from a different source within the
20 same air basin?

21 A Well, depending on how the changes, it
22 could be a very simple review. It all depends on
23 how the ERCs are changed.

24 If you're doing a change on an
25 interpollutant ratio, for example, the way

1 Pastoria did, that would require a little more
2 work.

3 If you are trying to do inter-basin that
4 would require a little more work. If you are
5 changing the interpollutant ratio we would need to
6 make sure that the calculations work out.

7 But in any aspect the mitigation that
8 was approved and reviewed through the initial CEQA
9 process would have been changed.

10 Q Let's go to the Tracy project you talked
11 about earlier. Where does the CEC decision on the
12 Tracy project require the provision of SO2
13 offsets?

14 A I'll see if I have that condition here.
15 It may take me a little while.

16 HEARING OFFICER WILLIAMS: Okay, we'll
17 go off the record.

18 (Off the record.)

19 MR. WALTERS: It's required under
20 condition AQC-4.

21 BY MR. HARRIS:

22 Q Does the CEC decision in Tracy require
23 the provision of offsets for ammonia?

24 A No, it does not.

25 Q Are you aware of any CEC decision in

1 which ammonia emissions have been required to be
2 an offset as a PM10 precursor to be offset?

3 A No, but I am aware of cases where they
4 have required lower amounts, 5 ppm versus 10 ppm
5 as a BACT requirement.

6 Q Are you in agreement that the sulfur
7 level of approximately 0.25 grams per 100 scf of
8 sulfur in natural gas is a reasonable value?

9 A Based on the data I've seen I think it's
10 a reasonable value and it's the value that's being
11 used for almost all the cases that are now
12 currently in front of the Commission.

13 Q So that would be true for all pipeline
14 quality gas in the San Joaquin Valley?

15 A As far as I'm aware.

16 Q Do you know whether this judgment about
17 the typical sulfur content is consistent among all
18 CEC reviewers, or does it vary from one CEC Staff
19 engineer to another?

20 A I'm not aware if it does or doesn't.

21 Q You indicated that reg 8 couldn't be
22 enforced directly, and that the CEC Staff lists
23 the individual dust mitigation requirements, is
24 that correct?

25 A What I identified was that our condition

1 is written so that the specific measures that are
2 required are detailed specifically so that
3 compliance can understand the condition and
4 understand what needs to be implemented as opposed
5 to have to try to ferret through eight different
6 District regulations to try to figure out what is
7 supposed to be done.

8 Q Did the staff list individual dust
9 mitigation requirements for the Tracy Peaker
10 project, or did they just require preparation of a
11 plan?

12 A We required both, or we did identify
13 specific ones, and require a plan.

14 Q Where are you looking? Can you give me
15 the reference, please?

16 A ACQ-1. When I say measures, that should
17 be addressed to included the following, and we
18 have one, two, three, four, five, six, seven,
19 eight, nine, ten -- 13 different bullet items of
20 the different mitigation devices that we would
21 want to see in the plan. Mitigation options we
22 want to see in the plans.

23 Q Are those the same as in AQC-3 for this
24 case?

25 A No, they're not exactly the same as ACQ-

1 3. At least not all of them.

2 Q What conditions in the Tracy project
3 decision requires the use of soot filters on 1990
4 certified engines? 1996, I'm sorry, certified
5 engines.

6 A Actually I do have to correct my earlier
7 testimony on that because, number one, I think I
8 forgot to make a yes from a no in a table.
9 However, I did delete the "or" earlier in the
10 column. Actually I don't know if I messed up on
11 the table, or if it got changed from my conditions
12 to the PMPD, and I didn't see the change.

13 But the intent during that case, it was
14 a very contentious case, with several intervenors,
15 the intent was to require it.

16 Q Are you recommending an amendment in the
17 Tracy case, then?

18 A The Tracy case is essentially built.

19 ASSOCIATE MEMBER GEESMAN: I want to
20 make certain I understand, then, your testimony as
21 to what was required in the Tracy decision on this
22 question.

23 MR. WALTERS: I'm looking at the
24 decision.

25 ASSOCIATE MEMBER GEESMAN: Okay. And

1 you said there was an error in your earlier
2 testimony?

3 MR. WALTERS: Yeah, I did delete the
4 "or" initially, but in the table that identifies
5 the mitigation, it does identify that for greater
6 than 100 horsepower if you use ultra low sulfur
7 diesel and particulate filters that you wouldn't
8 have to have the 1996 standards.

9 And I would like to add, if we can make
10 a determination that suitability is not feasible
11 due to case law, then that is remedied by our
12 condition, because it would be considered
13 unsuitable and they would already have relief.

14 So basically the general argument that
15 they have is they can't do both because 1996
16 precludes the use of the soot filters. However,
17 our condition specifically says it has to be
18 suitable for use. And if it's illegal, then it's
19 not suitable for use.

20 So there is a remedy the way it's
21 written right now.

22 BY MR. HARRIS:

23 Q So the language, if suitable as
24 determined by the CMM, is your out there, you
25 believe?

1 A Yes.

2 Q Looking at the Tracy condition, isn't it
3 true that they said if you did use a 1996 CARB or
4 EPA certified engine and the ultra low sulfur
5 diesel that you didn't have to use the soot
6 filters?

7 A Yes, actually I just answered that, yes.

8 Q Okay. I may have been formulating the
9 question while you answered, sorry.

10 Can we move on to the SO2 mitigation.

11 In your testimony you indicated that the CEC
12 believed that the applicant had failed to mitigate
13 the project's SO2 impacts, is that correct?

14 A They failed to mitigate all of the PM10
15 precursor impacts, SO2s would be the quantity of
16 the PM10 precursor that we're asking to be
17 mitigated.

18 Q So you've worked on a number of
19 Commission projects. Did you work on the Blythe
20 project?

21 A No, I did not.

22 Q Do you know whether the Blythe project
23 is located in an area that's nonattainment for
24 PM10?

25 A Are you talking about state or federal?

1 Q State.

2 A As far as I know every county besides
3 Lake is nonattainment, so for state it would be.
4 For federal, I do not believe it's in a
5 nonattainment area.

6 Q Do you know whether the Commission Staff
7 required SO2 mitigation for that project?

8 A I don't believe they did, but, again,
9 it's a different attainment status for federal.

10 Q But not for state?

11 A But not for state. But the background
12 numbers are still very different. There's a
13 difference in the amount of the exceedance.

14 Q And how about Contra Costa, do you know
15 whether the Contra Costa project is located in a
16 nonattainment area for state PM10?

17 A Again, as I answered, Lake County is the
18 only nonattainment -- or the only attainment area
19 for PM10 in the state.

20 Q Do you know whether the staff required
21 SO2 mitigation for the Contra Costa project?

22 A No, I don't.

23 Q Did you work on the Delta Energy Center
24 project?

25 A No, I did not.

1 Q Can I assume that you would state that
2 that's a nonattainment area for state, as well,
3 Contra Costa County, for PM10?

4 A Every county other than Lake.

5 Q Okay, so I can assume that. Do you know
6 whether the staff required SO2 mitigation for the
7 Delta project?

8 A No, I don't know.

9 Q How about High Desert?

10 A No, I don't know.

11 Q Isn't it correct that for most of these
12 projects the staff has concluded that, as a result
13 of the PM10 offsets that were being provided at a
14 ratio greater than one-to-one, that this
15 additional mitigation was sufficient to mitigate
16 the SO2 impacts without providing SO2 offsets?

17 A Yes. And none of these were in serious
18 PM10 nonattainment areas.

19 Q With regard to these projects I just
20 listed, are you aware of the staff position that
21 indicates that for CEQA purposes the mitigation
22 ratio of one-to-one is required?

23 A That's the general principle that we try
24 to adhere to, yes.

25 Q And are PM10 offsets being provided for

1 this project at a ratio of one-to-one? Greater
2 than one-to-one, excuse me.

3 A You're talking about the direct PM10?

4 Q Yes.

5 A They're being provided at 1.5-to-1.

6 Q Then why aren't these credits sufficient
7 to mitigate the project's SO2 impacts?

8 A They're not sufficient to mitigate all
9 of the PM10 precursor impacts which include
10 ammonia, which can be emitted up to 400 tons a
11 year.

12 Q Well, then how is this case different
13 from the Blythe, Contra Costa, Delta and High
14 Desert projects in that respect?

15 A The difference in this project is the
16 setting of the project, in a serious nonattainment
17 area for PM10. The required mitigation changes as
18 the air quality changes, and should. Just as the
19 District regulations change, the offset
20 requirements change for different classifications
21 of nonattainment.

22 Q What about the Tracy Peaker project,
23 isn't that located in the same District as this
24 project?

25 A Yes, it is. And they offset their SO2

1 at a 1.5-to-1 ratio.

2 Q What about their ammonia offsets.

3 A They didn't offset their ammonia, and
4 we're not asking you to offset your ammonia.

5 Q So the District has, for SO2 mitigation,
6 a threshold of 27 tons per year, is that correct?

7 A Yeah, I believe it's 27.

8 Q So understanding staff's position on
9 this, basically -- let me make sure I understand.
10 According to the District rules 27 tons or less no
11 ERCs are required, no offsets are required, is
12 that correct?

13 A Can you --

14 Q The threshold, the District threshold is
15 27 tons, so that means for projects with less than
16 27 tons per year the District does not require
17 offsets for SO2, is that correct?

18 A That's correct.

19 Q So the staff is taking a position
20 essentially contrary to that, is that correct?

21 A We're taking a position to augment the
22 amount of mitigation for the project.

23 Q So the District's regulations are not
24 sufficient, is that staff's position?

25 A I think if the District's regulations

1 were sufficient there would be an attainment
2 area -- have significantly better progress.

3 Q So the District ought to have a
4 threshold that's less than 27, is that staff's
5 position?

6 A I think it would be a pretty good idea.

7 Q So how low should they go? Is 22 low
8 enough?

9 A The other serious PM10 nonattainment
10 area that I'm aware of has a four ton limit.

11 Q Would four tons be low enough?

12 A I don't know if it would be low enough
13 or not.

14 Q Is the staff's basic position that every
15 single ton has to be mitigated?

16 A It's staff's position that for the
17 specific precursors they each have to be mitigated
18 to the one-to-one.

19 Q So if we could assume --

20 A For nonattainment pollutants, precursors
21 to nonattainment pollutants.

22 Q Assume in this case that there's one ton
23 in the San Joaquin District. Is it staff's
24 position that one ton of mitigation for SO2 would
25 be required notwithstanding the fact that the

1 District's level is 27?

2 A Let me see if I understand your
3 question. If the project's emissions were one
4 ton, are you saying? Or if their --

5 Q Assume that, yeah.

6 A -- threshold were one ton?

7 Q Assume that the emissions were one ton;
8 assume secondly that the District's level is as
9 stated, 27. Am I correct in assuming that the
10 staff's position is that that one ton would need
11 to be mitigated?

12 A If the project had one ton of a
13 nonattainment precursor, plus 400 tons of another
14 nonattainment precursor --

15 Q I didn't ask you --

16 A -- that was unregulated --

17 Q That's not my question.

18 A You're taking it out of context with
19 this source.

20 Q Hypothetical. I'm just trying to
21 understand staff's analytical methods here. The
22 hypothetical is, assume a source, Energy
23 Commission jurisdictional source; assume one ton
24 per year; assume 27 tons as a threshold. Is it
25 staff's position, understanding of LORS or staff

1 CEQA responsibilities, is it staff's position that
2 that one ton would need to be offset,
3 notwithstanding the District's threshold of 27?

4 MR. KRAMER: Object to the question as
5 posing a hypothetical that appears to be
6 irrelevant to the issues before the Committee.

7 MR. HARRIS: It's absolutely relevant to
8 staff's analytical methods. I just want to
9 understand how much they would require.

10 BY MR. HARRIS:

11 Q If they don't require it for one ton,
12 you can say that. What the methodology you
13 applied in this case, using my hypothetical. Just
14 trying to determine --

15 HEARING OFFICER WILLIAMS: Do you
16 understand the question?

17 MR. WALTERS: Yeah, I'm waiting for your
18 ruling; he had objected.

19 HEARING OFFICER WILLIAMS: If you
20 understand it, answer it.

21 MR. WALTERS: In a nonattainment area to
22 fulfill our general policy we would require a one-
23 to-one for each specific --

24 Q So my --

25 A -- pollutant.

1 Q Sorry, I thought you were finished. So
2 my hypothetical, the one ton, you would require
3 one ton of mitigation?

4 A Hypothetically we would.

5 Q Okay, sorry --

6 A Or we would certainly seriously consider
7 it.

8 Q -- sorry it took me so long to get
9 there.

10 A And particularly for a serious
11 nonattainment area.

12 MR. HARRIS: Can I have a moment to
13 confer; see if I can cut this down? Basically
14 I'm almost finished.

15 (Pause.)

16 MR. HARRIS: Okay, I have a question,
17 and hopefully this will short-circuit things a
18 little bit here.

19 BY MR. HARRIS:

20 Q I posed the question to Mr. Haber about
21 the rule that they had put forth on the 13th and
22 whether if that rule is approved in final form,
23 whether EPA would oppose the project. And Mr.
24 Haber answered that they would not oppose. Do you
25 recall that testimony?

1 A Yeah, in general, yes, I do.

2 Q Assuming that same set of facts, that
3 the EPA rulemaking is approved, will the staff
4 still oppose this project on the basis the ERCs
5 are not valid?

6 MR. KRAMER: The question needs
7 clarification. Are you talking about the pre-90
8 ERCs or --

9 MR. HARRIS: We can go through them each
10 individually. So, let's --

11 MR. KRAMER: There are different issues.

12 MR. HARRIS: Sure. Let's go through
13 them all individually.

14 BY MR. HARRIS:

15 Q So, assume hypothetical that I posed to
16 Mr. Haber that the rule, as proposed on the 13th,
17 is approved basically in the same form as it's
18 published now. You recall he said that the EPA
19 would remove their opposition.

20 So let's start out with assume that that
21 occurs. That's the baseline assumption. So with
22 that assumption in mind, is staff going to still
23 oppose the project, assuming that occurs, based on
24 the use of pre-1990 ERCs?

25 A Rather than answer oppose the project,

1 I'd rather just directly answer the issue of
2 whether or not the 1990 ERCS we would have any
3 problems with.

4 Right now, the rulemaking came out last
5 week. We haven't had enough time to look at all
6 of it. However, I think there's a good assumption
7 that we would find if EPA finds the pre-1990s to
8 be okay, that we would find it to be okay, as
9 well.

10 Remember, this is a very new development
11 and we're still assessing it.

12 Q Sure. Thank you. So assuming the facts
13 that I posed to Mr. Haber, if that rulemaking goes
14 forward the staff would not oppose based on the
15 pre-1990 issues? That's your testimony tonight?

16 A That is a likely outcome.

17 Q Can I ask for a yes or no?

18 HEARING OFFICER WILLIAMS: I don't
19 really think that he's in a position to answer
20 that yes or no.

21 MR. FREITAS: I think he's asking for a
22 conclusion. Trying to make him draw a conclusion.

23 HEARING OFFICER WILLIAMS: Yeah, I just,
24 you know, his answer is that is a likely
25 conclusion. I think that's the best that you're

1 going to get.

2 BY MR. HARRIS:

3 Q So, as a follow-up question, then, will
4 the staff then independently review EPA's
5 determination?

6 A I think staff is going to continue to
7 discuss the issue with EPA, and determine if we
8 have any comments on the issue, itself. Since
9 there is a comment period on the rule, we may even
10 comment on it. I don't think we will.

11 And like I said, I think it's likely
12 that if EPA finds the tracking system to be
13 acceptable, then we are likely to, as well.

14 Q I have the same question then with the
15 pre-1993 ERCs, assuming that the rulemaking is
16 approved.

17 A The tracking system would handle all of
18 the older ERCs. I'd also like to make a
19 correction. We're only looking at pre-1990s right
20 now for both. And that was through later
21 clarification with EPA, post-our addendum.

22 Q So the 1993 issue, is it gone? Or is
23 now a 1990 issue?

24 A Both of them are 1990 after further
25 discussion with the EPA.

1 Q Where is that in your prefiled
2 testimony?

3 A It's not. It's a very new development.
4 We've been discussing these things with EPA for
5 the last two months, but we've been getting very
6 slow reaction and decisions from EPA. So we're
7 doing the best we can.

8 Q What about the major shutdown rule?
9 Assuming again EPA's approval of the February 13th
10 rule.

11 A We're going to have to discuss that with
12 EPA and figure out how the shutdowns go into the
13 tracking system. But if they think that the
14 shutdowns are properly accounted in the tracking
15 system, then we essentially have the same answer.
16 If they believe that the issues have been dealt
17 with properly in the tracking system, then we
18 would have the same likely outcome.

19 Q Okay, I want to talk about AQC-7 now,
20 the table that you've all set forth listing the
21 ERCs.

22 The CEC's version of AQC-7, if the
23 applicant were to propose a change in an offset
24 from say offset A to offset B, do you believe that
25 the CEC Staff would have to have the ability to

1 evaluate the validity of offset B?

2 A I think it would be important to
3 identify the validity. And I think the EPA's
4 Federal Register identifies that as a requirement.

5 Q Okay, same basic hypothetical,
6 containing the same analogy, and assuming that the
7 same proposed change from offset A to offset B, do
8 you believe that the staff would have the ability
9 to re-evaluate the total quantity of offsets
10 required for the project?

11 A In terms of total quantity we could be
12 looking at the same quantities unless the
13 applicant were making a revision to, for example,
14 like they had, in fact Calpine had recently for
15 Delta to downwardly revise the PM10 limits of the
16 project.

17 We would certainly take a look at that,
18 and as we were doing in Delta, we would approve
19 that and change the requirements of the offsets
20 and the requirements -- and the number of listing
21 in the table.

22 Q So, taking it to the next step, again
23 assume same analogy, changing offset A for offset
24 B, can you assume -- does staff have the ability
25 to evaluate, for example, the validity of offset

1 C, a different offset, not one of the ones being
2 exchanged, for the purposes of this hypothetical?
3 Do you understand the hypothetical?

4 A Well, if offset C isn't going to be used
5 for the project, we wouldn't be evaluating it.

6 Q So, the amendment process you're
7 suggesting, in your view, staff's view, opens up
8 an evaluation of each and every ERC, not just the
9 exchange between offset A and offset B?

10 A No, no, I don't think you understood my
11 answer. And perhaps I didn't understand your
12 question.

13 In terms of when you were talking about
14 offset C, I thought you were talking about some
15 random offset that wasn't being used for the
16 project. If you're talking about a project that's
17 just further down the list, that isn't being
18 moved, changed or otherwise affected, we wouldn't
19 look at it.

20 We'd only be looking at specified
21 changes in the table. And if there's specific
22 text that you would like to correct in terms of
23 the verification of the condition, we can work on
24 that.

25 Q I apologize for the ambiguity in my

1 question. I see it now, I didn't when I
2 formulated it.

3 Does staff have a preference for where
4 the offsets are relative to the source? Let me be
5 more specific. You have a project in say Tracy.
6 Does the staff care -- which is in the northern
7 part of the District, does staff have a preference
8 for where the offsets come from for that project?

9 A We would like -- let me give you a list
10 of the preference and the type of offsets we would
11 like to see. That being said, we will still allow
12 any offsets that are allowed through the
13 regulation.

14 In terms of just a general preference
15 what we'd like to see are emission reductions that
16 occur at the same time or very close to the same
17 time that the emissions occur. And if they could
18 be onsite, that would be best of all.

19 And in general, yes, we would prefer
20 closer to farther away, but considering distance
21 to ratios for this project, if you wanted to
22 substitute something that was further away, that
23 would be all right.

24 Q So, as a matter of policy then, staff
25 would prefer that the ERCs be located from a

1 source that's near the new source, is that a fair
2 statement?

3 A For a matter of dealing with just
4 general project impacts, it's better if the
5 emission reduction is closer. But it's not a
6 requirement. It's just a general idea that we
7 would like to be able to follow whenever we can.

8 Q One more question and I'm going to go
9 back to AQC-5 and the issue about whether the
10 condition's just paper.

11 In your staff assessment, if you have it
12 in front of you, can you turn to page 4.2-37.

13 A I'm there.

14 Q There's some language there that I want
15 you to take, to listen to, and then I've got
16 another set of language that I'd like you to look
17 at, as well.

18 On that page you say the revised PM10
19 modeling analysis conducted by the applicant, SR
20 2002C, assumes extremely aggressive PM10 fugitive
21 dust control efficiencies which is considered to
22 be unrealistic without very aggressive compliance
23 demonstrations. Do you see that language?

24 A Yes, I do.

25 Q And now would you go to 4.1-47.

1 A Um-hum.

2 Q And again at the bottom of that page
3 there's language there I'd like you to look at.
4 It says the applicant's revised PM10 emission
5 rates assumes a very aggressive control efficiency
6 for dust 88. However, even with this efficiency
7 factor included, the modeling analysis shows
8 construction PM10 impacts are predicted to be
9 potentially significant even with the
10 implementation of the applicant's proposed
11 mitigation measures.

12 Additionally, without ongoing compliance
13 monitoring demonstration the control efficiency
14 used by the applicant in their air emission
15 estimates are highly questionable. Therefore, the
16 applicant's proposed mitigations are not
17 considered adequate.

18 Both of these quotations refer to more
19 or less aggressive compliance. Is it your position
20 that the Energy Commission's compliance staff is
21 unable to enforce conditions of certification
22 here?

23 A It's my belief, through discussion with
24 others, that CEC compliance staff will not be able
25 to be at this site on a regular basis to directly

1 enforce compliance with these requirements.

2 Q So, it's not that the measures won't
3 work, it's just that they need to be aggressively
4 implemented, is that your testimony?

5 A Aggressively implemented, and in order
6 to insure that, demonstrated.

7 MR. HARRIS: Okay, nothing else.

8 ASSOCIATE MEMBER GEESMAN: I had a
9 question. Based on your review of the Los Esteros
10 construction monitoring, what would you say is the
11 appropriate cycle at which the monitors need to
12 be, I believe your phrase was cleaned and zeroed?

13 MR. WALTERS: I would say daily.

14 ASSOCIATE MEMBER GEESMAN: Daily?

15 MR. WALTERS: Daily. In order to get
16 the best results.

17 ASSOCIATE MEMBER GEESMAN: Thank you.

18 MR. WALTERS: And certainly every two or
19 three days at a maximum. It was being done more
20 on a monthly basis.

21 HEARING OFFICER WILLIAMS: Is Mr.
22 Freitas still with us?

23 ASSOCIATE MEMBER GEESMAN: Might ask him
24 if he has any questions of this witness.

25 HEARING OFFICER WILLIAMS: I have a

1 question. In the Los Esteros case, who was given
2 the job of cleaning the monitors, or how did that
3 work? You said that it failed because of a lack
4 of implementation.

5 MR. WALTERS: It was, as far as I know
6 it was one of the consultants that were working
7 during the construction, which would have been a
8 consultant through the project owner.

9 MR. HARRIS: Paid for by the
10 construction owner, I think, but --

11 MR. WALTERS: Okay, paid for through --

12 MR. HARRIS: -- reportable --

13 MR. WALTERS: Okay, through, I meant by
14 paid for.

15 MR. HARRIS: But reportable to the CPM,
16 not to the applicant.

17 ASSOCIATE MEMBER GEESMAN: Mr. Freitas,
18 I think it's your turn.

19 MR. FREITAS: She's going to ask for a
20 break.

21 (Brief recess.)

22 HEARING OFFICER WILLIAMS: Mr. Freitas.

23 MR. FREITAS: Okay, we'll make it quick
24 and short and sweet.

25 //

1 CROSS-EXAMINATION

2 BY MR. FREITAS:

3 Q Mr. Walters, you heard the testimony of
4 Mr. Haber with the EPA today?

5 A Yes, Haber, yes.

6 Q Haber, yeah. I heard applicant's
7 counsel tonight in your cross that made a lot of
8 assumptions and I think from a layman's point of
9 view maybe you could clarify some conclusions that
10 I think were tried to be drawn and help me with
11 understanding that process of how it works.

12 Is your position to represent the staff
13 in their position? Or are you an independent
14 consultant that's retained by staff?

15 A I'm an independent consultant, but I'm
16 functionally CEC Staff in terms of creating my
17 assessment. My assessment is reviewed by an air
18 quality senior at the CEC. And we go through any
19 comments or any issues. So from that point of
20 view I'm essentially a functional equivalent to
21 the CEC Staff.

22 Q Okay, because when the questions were
23 coming to you it was like you're like where the
24 buck stops when it comes to staff's recommendation
25 then in requirements and anticipated positions?

1 A I would be one of several people who
2 work on air quality for different projects.

3 Q But you don't work for the EPA, right?

4 A I do not work for the EPA.

5 Q If you were asked to draw a conclusion
6 today, I guess it would be a scientific conclusion
7 or maybe be just a layman's conclusion off the
8 testimony of Mr. Haber with EPA, could you safely
9 conclude that he's rubber-stamped or approved this
10 process, this licensing project or application?

11 A I think his approval has been limited to
12 specific aspects they were having contention with,
13 rather than the entire project. The issues were
14 the pre-1990 credits and the tracking system that
15 in terms of what he was saying today was
16 implementation of that final rule. If it gets
17 approved, then they would drop their objection to
18 the use of 1990 credits.

19 Q Now, Mr. Haber, according to his card,
20 is the Senior Energy Advisor for Air Division, and
21 that's in San Francisco-based office of the EPA.

22 A Yeah, EPA, Region IX, yes.

23 Q Is that correct? Region IX.

24 A In San Francisco.

25 Q It's a separate region. Does Mr. Haber

1 speak for the regulatory agency, EPA in
2 Washington, D.C.?

3 A You know, I can only state what I
4 believe on that. We essentially asked him here as
5 a representative of USEPA.

6 Q Okay, so the USEPA, the statements that
7 were made by Mr. Haber today, he didn't present a
8 document -- are you aware that he presented a
9 document or a statement that was the position of
10 the USEPA today?

11 A Well, I think the position of the USEPA
12 is provided for in the three Federal Register
13 documents.

14 Q Is that what --

15 A Those are official --

16 Q That's what that was provided --

17 A -- official U.S. documents.

18 Q Okay. So these are the documents that
19 would be the authority, then, that everybody would
20 look to that would control?

21 A For those specific issues --

22 Q Right.

23 A -- that he was addressing in his
24 testimony.

25 Q Right. Okay. And you were asked

1 tonight if the EPA takes a final action to approve
2 these rules or to propose to approve the San
3 Joaquin Valley United Air Pollution Control's
4 revised permit exemption -- is that what we're
5 talking about here, or am I off track?

6 Are we talking about a revised permit
7 exemption? Or is the tracking a different
8 approval?

9 A What we're talking about in terms of the
10 allowance of the 1990 credits is the approval of
11 essentially the entire rule 2201, which includes
12 the new provisions for the tracking.

13 And assuming that is approved, with the
14 tracking in there, that's where his conclusions
15 come based on.

16 Q Could that be provisionally approved
17 with seeking public comment on the tracking issue
18 prior to --

19 A That's what they're asking -- the
20 Federal Register is the provisional approval, and
21 there is a 30-day, as far as I know, a 30-day
22 public comment period. And you can comment; in
23 fact, I think they give you a specific reference
24 to comment to if you have a comment on that
25 particular rule.

1 Q Okay, so that's basically what this
2 document represents, then, is a --

3 A Provisional approval.

4 Q -- provisional approval with a 30-day
5 public comment?

6 A I believe it's 30 day, I'd have to look
7 at the exact document --

8 Q Okay, whatever -- that's all right.
9 There's a public period comment.

10 HEARING OFFICER WILLIAMS: Mr. Freitas,
11 you might want to address that to the District's
12 witness who's coming up next. Might be a better
13 person to ask those questions of.

14 MR. FREITAS: Well, I know, but
15 applicant's counsel seemed to put a lot of value
16 in Mr. Walters' testimony regarding that. So I
17 just wanted to, you know, get clear idea of why he
18 put so much value in Mr. Walters' opinion on the
19 EPA's position.

20 MR. WALTERS: Well, I guess I can
21 probably answer that more directly.

22 BY MR. FREITAS:

23 Q Okay.

24 A Since staff's findings will be to either
25 say yes or no on certification of the project,

1 what they're trying to ascertain is based on these
2 issues what is our read from this. Not so much,
3 you know, are we EPA and are we the ones that are
4 promulgating this, but if EPA agrees to this are
5 we going to agree to this. And therefore, are
6 these issues going to disappear. That's what
7 those questions were all about.

8 Q And the bottomline with all that was
9 yes, they will? If it's approved they will
10 disappear, right? And the project will be
11 approved, right?

12 A Very likely.

13 Q Okay.

14 A I might even be able to go a little
15 stronger. Extremely likely.

16 Q Would there be any remaining issues if
17 this was approved, that the staff could have to
18 influence the licensing process?

19 A Well, there are issues that are
20 disagreements in our conditions which wouldn't be
21 issues where we would say yes or no; we would say
22 this is what we want in our condition.

23 Essentially the conditions AQC-3, 5 and
24 7 are ones that we have a dispute about. And we
25 have what we consider to be necessary for those

1 conditions. They have their opinion of what is
2 necessary for those conditions.

3 Those aren't necessarily things that
4 would be issues where we would say, no, we don't
5 want to approve the project. I mean because those
6 are actually issues that the Commissioners are
7 going to determine the final outcome.

8 And at the point where they determine
9 the outcome, depending on which way they go,
10 either we or the applicant will then make comment
11 on that from the proposed decision.

12 The issues that remain in terms of being
13 problematic are the two other offset issues. And
14 that's the Pastoria credit that we would like to
15 see formally amended to free it up for this
16 project. And the use of the SO2 credits.

17 Now, at the same time, the use of the
18 SO2 credits could be something that could be
19 directly added to the requirement by the
20 Commission. And if they were to do that we
21 wouldn't have any comments on it.

22 Q Assuming the source -- could you help
23 just explain to me because of the layman's terms,
24 could you help just explain real quick briefly the
25 assumed source of the 120 tons versus 400 tons of

1 District's threshold? That's all I wrote down,
2 that's all I could -- what you guys were debating
3 back and forth over. Could you kind of clear that
4 for me, what --

5 A Okay. Well, those numbers weren't
6 anywhere close to the thresholds we were talking
7 about. The thresholds are the offset emission
8 thresholds in rule 2211, or 2201, excuse me. And
9 they're different for each pollutant.

10 And once a new project that comes in is
11 above that limit, they have to offset the amount
12 that is above that offset threshold.

13 So, for example, the offset threshold
14 for NOx is 20,000 pounds a year. So if a project
15 comes in with requesting emissions of 40,000
16 pounds per year, they have to offset only the top
17 20,000. And the --

18 Q Great.

19 A -- initial is considered not necessary
20 to offset based on the offset threshold and how
21 the District rules are written.

22 Q Great, understand, thank you. Now, in
23 regards to that, you then added particularly in
24 serious nonattainment area. What did you mean by
25 that? Particularly serious nonattainment area.

1 A Well, in terms of what we consider
2 necessary for mitigation we have to address the
3 setting of the site. And the setting for this
4 site is in the San Joaquin Valley air basin. The
5 San Joaquin Valley air basin is categorized as a
6 serious nonattainment area for PM10.

7 As opposed to the Bay Area, or the
8 desert counties like where Blythe is, or
9 essentially any other place besides the South
10 Coast air basin around Los Angeles.

11 The last I looked at the maps, the only
12 two areas that are considered a serious
13 nonattainment area for PM10 would be this Valley
14 and the L.A. area.

15 So we have to take into account the
16 setting in terms of, you know, what we require for
17 mitigation.

18 Q When staff formalizes their opinions and
19 their conditions and verifications and those
20 requirements, are they like a work in progress?
21 Could you consider those to be like a work in
22 progress that actually are affected by past,
23 present and future applications that come in, and
24 the perspective differences and site specific
25 differences with each application and location?

1 A Well, I think, I don't know if work in
2 progress is the best way to categorize it. Maybe
3 to say that we address site-specific issues in our
4 conditions of certification. And that as -- there
5 is controls and other requirements, you know,
6 become more available or reasonable over time.

7 For example, the use of the 1996
8 standard engines are available now, where they
9 wouldn't have been available in 1997.

10 Q Exactly.

11 A So, to the extent that it is reasonable,
12 you know, for additional mitigation where
13 additional mitigation is warranted, we would, in
14 general, you know, take those factors into
15 consideration.

16 Q Like I think one of my questions was
17 there was a term alluded to earlier in some
18 testimony yesterday that was alluded to the term
19 black box. And I just wondered if that theory of
20 using a black box theory approach at approving a
21 license, if you could categorize it or
22 characterize it as being -- as this application,
23 not fitting within that context of the black box
24 application?

25 A I don't think that, from an air quality

1 perspective, any of the air quality analysts would
2 consider any project a black box. We evaluate the
3 project specifically based on the project, itself,
4 and its emissions, its setting, all of the other
5 things.

6 So it's always fairly specific. And we
7 come up with different findings based on the
8 specifics that we're analyzing for each project.

9 Q Were there not some black box criteria
10 that were approved and used two, three, four years
11 ago on some peaker plants that were put into the
12 construction phase to meet the emergency?

13 A Well, the emergency siting process is
14 very different than what we're doing here.

15 Q Okay.

16 A It's not an equivalent process.

17 Q Okay. And that's where that was born
18 out of, kind of the black box context?

19 A The emergency siting process only
20 happened for a very short time, and it's not, you
21 know, currently a process at the CEC.

22 Q Okay. On the offset tracking system the
23 words new and unproven were used. Is that your
24 understanding of this new tracking system that's
25 part of this program that's going to be approved

1 or --

2 A That it was --

3 Q It's new and unproven?

4 A This particular tracking system, as far
5 as I know, --

6 Q Hasn't been implemented --

7 A -- is new and unproven. Unproven in
8 terms of what we've talked to Matt Haber about.
9 They haven't seen the first report yet, so for
10 this particular tracking system; nor have we. And
11 obviously, you know, who knows how well it's going
12 to work over the next five, ten years.

13 So all we're trying to note is there is
14 some inherent risk in this tracking system.

15 Q So basically this tracking system has
16 not been implemented?

17 A I think the best person to answer that
18 question is sitting behind you.

19 Q Okay. Okay, I'll save it for him.

20 A I believe they have started to implement
21 it.

22 Q Okay.

23 A But the first report hasn't come in yet.
24 But I will let him correct me if I'm wrong.

25 Q Okay. Can you remember the testimony,

1 can you recall the part of the testimony where
2 there was questions that were deemed objectionable
3 in an opinion, someone else's opinion, earlier
4 part of the testimony? The statement was made
5 that some of the questions were objectionable,
6 that's why they weren't brought up. Do you recall
7 that?

8 A Well, I think there's been several
9 objections, so I'd need you to pin down the
10 particular objection that you're referring to.

11 Q I think it was one of your responses
12 to -- I don't think it was a hypothetical. I
13 think it was a response to why you didn't respond
14 to one of their suggestions. And you guys didn't
15 respond. Or applicant didn't respond because they
16 thought it was objectionable.

17 A Oh, that's referring to the data request
18 that we did put out. Essentially when we
19 discovered that -- we didn't know what was going
20 on with the Pastoria case, and obviously we found
21 that some of the original Pastoria credits were
22 being used for this case, you know, at that time
23 we could make a determination that the Pastoria
24 case was still fully offset; it was a licensed
25 project. It obviously needed to be fully offset.

1 It was approved as a fully offset project, you
2 know, under District regulations at that time.

3 So, our questions were basically to
4 reconcile those ERCs, and I believe some
5 additional questions on the ERCs in terms of
6 timelines and to get additional information on the
7 ERCs that were being proposed for San Joaquin.

8 And the applicant, at that time,
9 objected to the data requests.

10 Q On the up-and-downwind monitoring and
11 the meters that you mentioned, there was a problem
12 with implementing the program. Would you say that
13 that's grounds to claim that the program is a
14 failed program?

15 A No. I think it just means that it
16 needed to be done a little better. The program
17 could have worked if it would have been
18 implemented, or it could have fit its purpose if
19 it would have been implemented properly.

20 Q Would it be safe to say that staff could
21 make a recommendation on how they implement,
22 properly implement a program that they suggest,
23 and make that part of a condition?

24 A I believe that's already inherent in the
25 conditions. That we would be requiring the plan,

1 as part of the various mitigation plans for
2 construction, and as part of that plan we would be
3 approving how they would be doing the ambient
4 monitoring.

5 Q Do you see that as an over-burden being
6 placed on the applicant?

7 A Well, let me give you some details on
8 how Los Esteros worked. Essentially there were
9 three monitors that they used. They essentially
10 set them up in specific locations at the beginning
11 of the construction period each day. And did one
12 or two measurements on wind direction and wind
13 speed during the day. And then pulled the
14 monitors and downloaded the data.

15 So that's essentially what that program
16 was all about. And then eventually, of course,
17 they tabulated the data and provided it to the CEC
18 for review.

19 Q And it showed that it justified the use
20 of that system? I mean that system worked? It
21 produced data that was --

22 A It produced data that was usable when
23 the machines were cleaned and zeroed on a regular
24 basis, or shortly after the machines were cleaned
25 and zeroed. Before the zero drift got to such a

1 degree that you couldn't tell what the actual zero
2 was for each monitor.

3 Q Do you understand the nature of my
4 question is that I agree with staff, why should
5 they be held to put in monitors if the system's
6 not going to be functional? What's the use?

7 A Right, and I think basically the system
8 can be made to function, you know, fairly easily.

9 Q Okay, that's what I was getting at. It
10 was implemented for a reason?

11 A Well, it was put in for a reason. I
12 mean originally staff wanted to put in, not as a
13 demonstration project, but as a general
14 requirement. It ended up as a demonstration
15 project. At least that's my understanding of it.

16 MR. FREITAS: That's it.

17 HEARING OFFICER WILLIAMS: Do you have
18 any redirect?

19 MR. KRAMER: No.

20 HEARING OFFICER WILLIAMS: Okay. Then I
21 think we're through with Mr. Walters. We
22 appreciate it and thank you.

23 And we're ready for the San Joaquin Air
24 District.

25 UNIDENTIFIED SPEAKER: We have breakfast

1 coming in in a little while.

2 (Laughter.)

3 MR. FREITAS: Are we on the record or
4 off the record?

5 HEARING OFFICER WILLIAMS: We're on the
6 record.

7 MR. FREITAS: We're on the record.
8 Thank you for indulging my questions,
9 Commissioner.

10 ASSOCIATE MEMBER GEESMAN: It's your
11 right, as an intervenor, which you've handled very
12 well, I should say.

13 MR. FREITAS: Thank you.

14 HEARING OFFICER WILLIAMS: Sir, you're
15 here by request of the Committee. And the
16 Committee is sponsoring your presentation today.
17 But, for the sake of efficiency I think I'm going
18 to ask applicant to sponsor your actual testimony
19 in terms of having you introduce whatever. And
20 then we'll have you subjected to staff's cross-
21 examination.

22 MR. WARNER: Very well.

23 HEARING OFFICER WILLIAMS: I think
24 that's the best way to proceed. Do you have any
25 problem with that, applicant?

1 MR. HARRIS: You'd like me to establish
2 the foundational questions and --

3 HEARING OFFICER WILLIAMS: Yes.

4 MR. HARRIS: -- then ask him to
5 summarize?

6 HEARING OFFICER WILLIAMS: Yes.

7 MR. HARRIS: Yeah, I'd be honored. Let
8 me find my cheat-sheet. Can I ask that the
9 witness be sworn.

10 HEARING OFFICER WILLIAMS: Okay.
11 Whereupon,

12 DAVID WARNER
13 was called as a witness herein, and after first
14 having been duly sworn, was examined and testified
15 as follows:

16 DIRECT EXAMINATION

17 BY MR. HARRIS:

18 Q Could you please state your name for the
19 record?

20 A David Warner.

21 Q And I understand you're here to sponsor
22 testimony on behalf of the District, is that
23 correct?

24 A That's correct.

25 Q And can you state the full name of the

1 District for the record, please.

2 A San Joaquin Valley Unified Air Pollution
3 Control District.

4 Q And will you accept, subject to check,
5 that the District's FDOC has previously been
6 identified as exhibit 4A-37?

7 A Subject to check.

8 Q Yes, okay.

9 HEARING OFFICER WILLIAMS: Verified.

10 MR. HARRIS: Checked and verified.

11 Locked and loaded.

12 BY MR. HARRIS:

13 Q These documents were prepared either by
14 you or at your direction?

15 A That's correct.

16 Q And the facts stated therein are true to
17 the best of your knowledge?

18 A That's correct.

19 Q And the opinions that you're offering on
20 behalf of the District are your own, is that
21 correct?

22 A That's correct.

23 Q And you adopt this as your testimony for
24 this proceeding?

25 A Yes.

1 Q Would you provide a summary of your
2 qualifications and generally I think in two
3 categories, first your educational background, and
4 then your professional experience.

5 A Certainly. My educational background is
6 a bachelor of science in physics from CalPoly San
7 Luis Obispo. I spent five years as a process
8 engineer in a semiconductor firm. And then moved
9 into air quality. Been an air quality engineer
10 and a manager of air quality engineers for 13
11 years.

12 Q And what is your current position and
13 title with the District?

14 A I'm a Manager of Permit Services.

15 Q Thank you. I think at this point we may
16 have a question or two later, but I'd ask you to
17 go ahead and summarize your testimony, or make
18 your statement on behalf of the District.

19 A Well, first of all, thank you to the
20 Commission for allowing the District to present
21 our viewpoint on a couple of these issues.

22 We have five pages of notes prepared to
23 deal with EPA's objection. I was very comforted
24 to hear that EPA has chosen to address these pre-
25 1990 credits and all surplus issues on a

1 programmatic basis.

2 But I think a few comments along those
3 lines are still in order. And believe me, I'm
4 trimming it down tremendously in the interest of
5 the hour.

6 The San Joaquin Valley Energy Center DOC
7 was issued in conformity with all the District
8 regulations, just as in the case of other, I think
9 it's four or five other major power plants that
10 have been permitted in the last couple of years in
11 the San Joaquin Valley.

12 There's no other option for the
13 District. We implement our regulations to their
14 fullest, and cannot go beyond those, whether
15 issuing permits to gas stations or determinations
16 of compliance to a new major power plant.

17 For each of these previous power plant
18 DOCs we've approved the use of pre-1990 credits
19 according to the rules of our District. For each
20 of those, EPA and the CEC have seen fit to approve
21 that use.

22 In at least one of these cases, Sunrise,
23 EPA did comment on the use of pre-1990 VOC and NOx
24 credits; and on the use of pre-1993 PM10 credits.
25 But then subsequently withdrew their objections, I

1 believe it was in a hearing such as this. And
2 agreed essentially with the District's approach of
3 dealing with these issues on a programmatic basis.

4 That's what's required by our
5 regulations. We've always pooled sources that
6 under our system, according to our banking rule,
7 that's rule 2301, emission reduction credit
8 banking, banked credits cannot be taken away from
9 sources. They're a value to sources. Our credit
10 banking rule says that we can't take them away
11 without a public process.

12 Until now with I guess EPA's stance,
13 with two brief exceptions, in this case and in the
14 Sunrise case, EPA's stance has been in concurrence
15 with that position. It's a programmatic issue,
16 not a case-by-case analysis issue.

17 This is an environment within which the
18 proposal, the credits were purchased by Calpine,
19 or by the applicant, and proposed in an offsetting
20 package. Including the use of these pre-1990
21 credits. And that's an environment within which
22 the District approved the use of those pre-1990
23 credits.

24 I guess the lack of fairness there is
25 self evident. We're applying our rules in a set

1 regulatory manner, and the San Joaquin project is
2 now being told that these pre-1990 credits may be
3 worthless. Hopefully, that's not the case. And
4 we'll stand by our determination that they are
5 totally valid credits.

6 There's been no change in regulation, by
7 the way, that brought up these comments from EPA
8 in the first place. It's as big a surprise to the
9 District as it was to the applicant.

10 We would be concerned if CEC Staff
11 continues to find fault with these credits in
12 light of EPA's comments and recent actions and
13 notices in the Federal Register. The District and
14 EPA have been working on this issue for many
15 years. 1994 is when we first broached this and
16 came actually a written memorandum of
17 understanding about a tracking system with EPA.
18 And these types of credits and these issues are at
19 the heart of those agreements. And they're to be
20 addressed on a programmatic basis according to
21 that memorandum of understanding.

22 So, hopefully that issue can be put to
23 bed at the conclusion of the noticing requirements
24 of the Federal Register notice.

25 I heard a couple of questions I can

1 answer. The notice comment period is open until
2 March 17th. And there was another question about
3 whether the EPA notice would encompass all three
4 categories of credits that we've heard about, the
5 pre-1990 VOC and NOx credits, ozone precursor
6 credits, the pre-1993, which I understand is now
7 pre-1990 also for PM10, and the major source
8 credits.

9 All of those are enshrined in that
10 tracking system. It's a tracking system that is
11 essentially established to either approve or
12 disprove the District's contention that our
13 District and state program is equivalent in terms
14 of mitigation of the federal program.

15 And there's very specific happenings if
16 that tracking system fails. And that result of
17 failure is that all of the actions that took
18 place, all the shortfall in surplus credits that
19 causes the tracking system to fail has to be
20 remediated. So we have to immediately start
21 taking more and more credits in various ways.
22 There's a number of ways we can do that.

23 But the result is that either we prove
24 that our tracking system is equivalent, or the
25 hammer falls, as they say. And we take additional

1 credits until that equivalency is reached.

2 So there's really -- I've heard some
3 issues of concern expressed here that, you know,
4 maybe this isn't something that addresses the
5 issue. It does. And I'm convinced, I'm sure that
6 the CEC Staff will see that as they dive deeper
7 into it. I know it's brand new.

8 Kind of try to see if there's anything
9 else I wanted to make a real point here. There is
10 one other issue, at least, and that is that this
11 entire issue of the credits has, the pre-1990
12 credits, is truly nothing but an accounting issue.
13 I've heard it talked about a couple of times.

14 It has no impact on air quality. It's
15 merely the EPA and the District coming up with an
16 agreement on what are the exact mechanics of
17 accounting for those credits.

18 We start with a baseline emissions back
19 in 1990 and were required to reduce emissions by
20 15 percent for six years, and then 3 percent per
21 year after that. And you end up with a given
22 point that we reach clean air theoretically.

23 The way we account for these pre-1990
24 credits is we add them into that baseline period.
25 They're a very very small percentage of this

1 total, but you still have to end up with the same
2 point. There's no question between the District
3 and the EPA that it's just the mechanics of that
4 accounting mechanism that are at issue.

5 I think that's going to be it for -- I
6 tried to pare this down in terms of hopefully the
7 rest that EPA has put on the issue, so I'm going
8 to stop right here.

9 HEARING OFFICER WILLIAMS: Okay, thank
10 you. Staff, do you have any questions?

11 MR. KRAMER: Yes, thank you.

12 CROSS-EXAMINATION

13 BY MR. KRAMER:

14 Q Are you aware of what our staff calls
15 the double counting, the appearance of one
16 particular offset in both the lists for the
17 Pastoria project and for the San Joaquin project?

18 A Yes, I am.

19 Q When did the District first become aware
20 of that?

21 A I don't have that date, that
22 documentation in front of me.

23 Q Can you peg that date to one of the
24 events you're aware of, the publication of either
25 the preliminary or the final determination of

1 compliance, for instance? Was it before or after
2 one of those events?

3 A It was definitely after the preliminary.
4 I don't remember whether it was after the final.

5 Q Okay. And what brought it to your
6 attention?

7 A A letter, we did receive a letter to the
8 District from the applicant that detailed it. But
9 I think it was actually brought to our attention
10 by CEC Staff.

11 Q Did that cause you any concern that the
12 credit was showing up in two places?

13 A Minor concern. Our process is somewhat
14 different than the CEC's process in terms of
15 requiring the emission reductions, as I understand
16 it. We require that applicants demonstrate to us
17 they have the right to credits prior to us issuing
18 an authority to construct or PDOC in this case.

19 And then they required to surrender
20 those credits at the time or prior to actually
21 commencing operations. The fact that one of the
22 credits was double counted would have been
23 discovered at that final surrender stage because
24 it would no longer be available. So it would have
25 been discovered before the requirement the offsets

1 actually be surrendered to the District.

2 Q So initially to demonstrate to you that
3 they have the offsets, do they have to give you
4 the specifics, the who, what, when and where of
5 what the offset is?

6 A That's what we ask, yes.

7 Q And is it the District's expectation
8 that those same credits that were described will
9 be the credits that are surrendered just prior to
10 operation?

11 A Not necessarily, no.

12 Q Have you changed your position on that
13 recently?

14 A We have as of the date that the Federal
15 Register publication of EPA's notice of approval
16 of our NSR rule that's been discussed here today.

17 Q That was published last week?

18 A That's correct. We established a policy
19 in part based on that notice that we'll require on
20 all future applications that type of
21 identification of each specific ERC is made. And
22 that will become a part of the authority to
23 construct, or the PDOC as conditions. That these
24 credits are the ones to be used.

25 There will be another condition on all

1 future permits that says that should a change be
2 proposed, we will go through a duplicate of the
3 noticing procedure, the original noticing
4 procedure, whatever it may be.

5 Q Now if the -- this is a hypothetical
6 question, but if you were to be writing the PDOC
7 or the FDOC for this project today, would you
8 apply those two conditions you just described?

9 A Yes, we would.

10 Q But you didn't in this case because they
11 were issued prior to your change in policy?

12 A That's correct.

13 Q Are you familiar with the staff's
14 proposed condition AQC-7?

15 A No, I'm not.

16 Q Okay, let me show it to you and --

17 MR. KRAMER: Can we go off the record so
18 he can take a minute to review it?

19 HEARING OFFICER WILLIAMS: Let's go off
20 the record.

21 (Off the record.)

22 BY MR. KRAMER:

23 Q Is the staff's proposed condition AQC-7
24 similar in nature to the two conditions that you
25 described?

1 A Actually it's similar in nature to the
2 first condition I described. The second
3 condition, again, outlines our procedures if such
4 a change is proposed. And that would be limited
5 to a renoticing of the offsetting package, not --
6 and it doesn't seem to be defined what path would
7 be taken here. So that's the only difference.

8 Q Okay. If I told you that there's a
9 Commission rule that anytime a change needs to be
10 made to the text of the condition that it has to
11 be reviewed by the Commission would that sound to
12 you to be equivalent to your second rule?
13 Describing some kind of path for review of
14 changes.

15 A I would say that it would describe a
16 path, some kind of path, yes. It doesn't sound
17 like a similar path, but -- we intentionally
18 limited the scope of that second condition to only
19 the offsetting package. So I'm not sure whether
20 that's what you're saying.

21 Q Oh, okay. All right. Let's move on to
22 a couple other points. In your review of the
23 project we could not find any specific reference
24 in either the FDOC or the PDOC to your rule 2201,
25 specifically that the major source shutdown

1 requirement that you've heard discussed quite a
2 bit today.

3 Did you review the project for
4 conformance with that rule?

5 A Yes, we did.

6 Q Was your conclusion discussed at any
7 place in the PDOC or the FDOC? If you could point
8 to it for us? Or might it have been silent on
9 that point?

10 A Yeah, I haven't -- I don't recall seeing
11 it, actually, in the FDOC or the PDOC.

12 Q The Federal Notice that we've been
13 referring to today describes the value of pre-1990
14 ERCs as zero. Are you familiar with that concept
15 as it was described in the background section of
16 that notice?

17 A Yes, with the provision that we're
18 talking directly about the tracking system that
19 we've implemented.

20 Q So if those have a value of zero, how
21 are you going to provide the value that's
22 necessary for them to be effective offsets for the
23 applicant? You have to net them out at the end of
24 the year, correct?

25 A Correct.

1 Q So you're going to have to get those
2 credits from somewhere else?

3 A That's correct.

4 Q And where will that be?

5 A Well, there are a number of
6 methodologies. Number one, we're not conceding to
7 the EPA's point yet that pre-1990 credits have a
8 zero value. As I touched on, we've always thought
9 that this needs to be a programmatic issue
10 addressed in planning, our planning efforts.

11 But EPA has in its possession our
12 December 2002 rate of progress plan that
13 specifically includes pre-1990 credits. And we'll
14 be negotiating with them on whether that's an
15 adequate accounting of those pre-1990 credits.

16 If it is an accurate assessment of those
17 pre-1990 credits, then the value we will maintain
18 is not zero.

19 With that said, there are many many
20 methodologies to use to make up for that shortfall
21 in credits. As Matt Haber of the EPA testified
22 today, we do have many provisions in our new
23 source review rule that are much more stringent
24 than federal law. And that's why we're able to
25 put together this tracking system that

1 demonstrates equivalency. We require much higher
2 offset ratios on the whole. We require offsets of
3 minor sources of emissions, which the federal
4 regulations do not. And that's actually the
5 majority of our permitting sources are minor
6 sources of air pollution.

7 We also will be taking credit for
8 shutdowns of minor sources that don't bank
9 emission reduction credits. And the list goes on.

10 Q Okay, but the pre-90 credit that's at
11 issue in this case is a pretty big credit, isn't
12 it?

13 A Yes, it is.

14 Q So are you going to be able to generate
15 with these minor sources enough to make up for --
16 to balance that credit out when it comes into the
17 system?

18 A Well, as I said, it's not just minor
19 sources. As I said, we require offsets at a much
20 greater ratio than federal requirements. They
21 require 1.2-to-1 offsetting; we require 1.5-to-1
22 in most cases.

23 So there are other mechanisms other than
24 minor source shutdowns.

25 Q Okay, but the District is in some danger

1 of being redesignated as an extreme area, correct?

2 A No, that's not correct. The District is
3 evaluating whether we want to voluntarily be
4 designated as extreme.

5 Q Okay, and if you do that, then your
6 offset, the federally mandated offset requirements
7 will become higher, right?

8 A A lower threshold before offsets are
9 required under federal law, that's correct.

10 Q So that will adversely affect your
11 ability to generate surplus credits?

12 A It certainly would if we go to extreme.

13 Q When is the decision likely to be made,
14 if you know, on whether to request that status --

15 A Probably not till 2005.

16 Q You described the problem of the
17 credits, pre-90 credit, as an accounting issue.
18 But isn't it true that in order to at least one of
19 the methods that you say you've chosen to account
20 for the credits is to add them into the inventory
21 for planning purposes.

22 But then once you do that you'd have to
23 find offsetting reductions, more offsetting
24 reductions in order to be able to demonstrate that
25 you're on the path to attainment, correct?

1 A That's correct. And we have done that.

2 Q Okay, but there's a real cost there,
3 because either somebody has to spend money to
4 produce their offsets, or you have to take more
5 off the top from people who are putting their
6 reductions into the bank for credit.

7 So it's not just simply moving numbers
8 on books, is it?

9 A I'm afraid you've lost me on that one.
10 It is just a matter of moving -- what we're really
11 talking about is, is a ton of emission reduction
12 credits from 1989 worth less than a ton of
13 reductions from 1991. And the District's position
14 is no, it's not, if the proper accounting takes
15 place. And that's what we're doing.

16 Q But to get there you may have to
17 increase the amount that you siphon off of other
18 credits that are flowing through the system, and
19 that disadvantages those people who are bringing
20 new credits into the system?

21 A No, our plan doesn't include siphoning
22 off existing amounts from existing surplus
23 credits. We don't believe that will have to
24 happen. That could happen if our tracking system
25 fails.

1 Q Okay, but did you say that one of the
2 methods you are using is to have stricter
3 standards for new sources, for instance?

4 A We already have stricter standards for
5 new sources. Nothing really changes. We're
6 talking about hundreds of tons in the baseline.
7 And less than 10 tons additional per day, daily
8 numbers.

9 And so it's a very small amount. And
10 when we added that into the baseline as growth, it
11 had essentially no effect on our demonstrations.
12 There was no -- we didn't, because of that, have
13 to forecast additional rules will be required. We
14 didn't have to say it looks like we're going to
15 have to take away additional credits. There were
16 no modifications to the plan because of this.
17 It's that small of an accounting issue.

18 Q So, am I hearing you now to say that
19 it's fairly easy to take care of that?

20 A In the planning process, yes.

21 Q Okay. In the Sunrise case, which you
22 alluded to, in January of 2000, January 13th to be
23 specific, there was a hearing at which EPA
24 representatives appeared on the telephone. Were
25 you present at that hearing?

1 A No, I was not.

2 Q That was Mr. -- I'm going to mangle his
3 name -- Sayed Sadredin?

4 A That's correct.

5 Q He was present?

6 A Yes.

7 Q Do you have any knowledge of what
8 happened at that hearing?

9 A Only through review of parts of the
10 transcript.

11 Q Okay. Then let me ask you, is it true
12 that EPA raised objections to the use of pre-1990
13 credits in the Sunrise case?

14 A In the testimony they actually withdrew
15 that objection.

16 Q And was any promise made to them by the
17 District that induced them to withdraw that
18 objection?

19 A Yes.

20 Q What was that promise?

21 A That we would account for the pre-1990
22 credits in our planning efforts.

23 Q Okay, and you finally did so in the last
24 months of 2002, correct?

25 A That's correct.

1 Q Why did it take almost two years to do
2 that if it was such an easy accounting matter?

3 A Well, the rate of progress plan is far
4 more than the addition of these credits. It's
5 handled by our planning department; I don't know
6 the schedule that it was supposed to be on or
7 anything about the schedule of that plan.

8 MR. KRAMER: Can we go off the record
9 for a second?

10 HEARING OFFICER WILLIAMS: Off the
11 record.

12 (Off the record.)

13 HEARING OFFICER WILLIAMS: Back on the
14 record. We'll continue with staff's questions.

15 BY MR. KRAMER:

16 Q Okay, I want to go back to the point I
17 was exploring a minute ago. The notion that this
18 pre-90 ERC might be made valid, if you will, by --
19 or might have its credits actually generated by a
20 whole host of surplus reductions on other sources
21 that could be unrelated to the original source
22 that gave rise to the credit, correct?

23 A I really wouldn't characterize that like
24 that. Our tracking system is a column of pluses
25 and minuses, and if we have to call the credit

1 zero, then it doesn't mitigate the increase from
2 this project. And so we have to have other
3 negatives to fill the gap.

4 But --

5 Q But today we don't know where those come
6 from, right?

7 A That's correct.

8 Q So we don't know if they're in the
9 extreme north of the District, the extreme south?
10 Whether they're something like road paving for
11 PM10 or there's just no way to know, is that
12 correct?

13 A Well, I mean that's the crux of our
14 problem with addressing these issues on a project-
15 by-project basis. They're programmatic in nature.
16 They're not -- the value of that pre-1990 credit
17 is not zero to any purpose except for tracking.
18 The reductions really occurred; they actually
19 happened, that 700 -- or the 300 tons of
20 reductions per year really happened.

21 And so that is sufficient mitigation for
22 this project. It is not sufficient mitigation, it
23 is not sufficient to demonstrate on a programmatic
24 basis that our NSR rule is equivalent to the
25 federal regulation.

1 And so that's where we would come up
2 with these additional mitigation efforts to fill
3 that gap.

4 Q Okay, let me take you back to the
5 Federal Register filing. I don't have -- it's 4A.
6 -- we know what we're talking about -- 53.

7 And I'd like you to read a paragraph
8 that I've marked with a line on the side. It's
9 on, first for the others, it's on page 7335, the
10 middle column. It's the first paragraph that
11 begins three lines down from the top of the page.

12 If you could read that paragraph for us?

13 A The 1994 ozone plan included ROP
14 milestone provisions for 1996 and 1999. The plan,
15 however, did not include pre-1990 credits in the
16 ROP provisions or attainment demonstration. The
17 District has recently prepared and adopted a ROP
18 plan for the 2002 and 2005 milestones.

19 We will review this ROP plan to
20 determine if the District has properly accounted
21 for the use of pre-1990 credits and met applicable
22 ROP requirements. But this alone will not provide
23 the necessary demonstration that the use of the
24 credits is consistent with the need for the area
25 to attain ozone NACs as expeditiously as possible.

1 Unless and until the are submits a new
2 attainment demonstration that shows expeditious
3 attainment can be achieved while still allowing
4 the use of the credits EPA cannot reasonably
5 conclude that these pre-1990 reductions are
6 surplus creditable reductions.

7 Q So, do you read that to say that EPA is
8 not going to be satisfied with simply your adding
9 these to the inventory in the rate of progress
10 plan, but is also expecting it to be in the
11 inventory for your attainment demonstration?

12 A That is how this is written, that's
13 correct.

14 Q And do you have a plan to satisfy that
15 requirement that they've expressed there?

16 A Yes. We have a proposal to discuss with
17 EPA and actually have been discussing with the
18 EPA. We don't consider this background section of
19 the Federal Register notice to be the final say of
20 any of these issues. And so we will still be
21 addressing this with EPA.

22 They're basing these conclusions on a
23 1994 memo, the sites memo that's been discussed
24 here. And we think their conclusions, based on
25 that memo, leave something to be desired.

1 Q Will these discussions conclude prior to
2 the finalization of this proposed rule? Or do you
3 expect them to continue on past that point?

4 A I have no idea. I would expect them to
5 continue beyond that point.

6 Q So is it fair to say that the District
7 hasn't accepted all of the parts of the deal or
8 solution to this ten-year dilemma that's been
9 described today?

10 A I think that's a fair characterization,
11 yes.

12 Q So in your mind does that make the
13 viability of the pre-1990 credits still suspect
14 despite this recent proclamation?

15 A No, I'm very encouraged by this
16 proclamation because it puts the issue back on a
17 programmatic level where it belongs, rather than a
18 case-by-case, project-by-project analysis.

19 Q But is it ever going to get resolved?
20 Or is it -- is the program going to be the
21 continued discussions --

22 A That's a good point. That's a very good
23 point. And the answer is yes, it will be
24 resolved. And the cards are in EPA's hands. They
25 have the final say in whether they're going to

1 approve our rate of progress plan and future
2 attainment plants. And if they don't accept our
3 proposals on how to deal with these pre-1990
4 credits programmatically, they do have the ability
5 to disapprove our plan and kick in the legal
6 sanctions that are prescribed by federal law. And
7 as we've heard today, none of those prescribed
8 sanctions includes taking credits away on a
9 project-by-project basis.

10 So, I think, yes, there is an end in
11 sight. And as I say, unless we can convince EPA
12 of our position, we will either accept their
13 position, and again that will address -- we'll
14 accept their method of accounting for these pre-
15 1990 credits. Or they'll kick in sanctions and if
16 nothing gets resolved, they'll do the ultimate,
17 which is come in and take over the program with a
18 federal implementation plan.

19 So, yeah, they've got all the cards.
20 But one way or the other the entire issue will be
21 resolved to EPA's satisfaction.

22 MR. KRAMER: No further questions, thank
23 you.

24 HEARING OFFICER WILLIAMS: Mr. Freitas.

25 MR. FREITAS: Wasn't expecting that. I

1 feel it's necessary just to inject a personal
2 feeling about --

3 HEARING OFFICER WILLIAMS: Do you want
4 to make a public comment?

5 MR. FREITAS: No.

6 (Laughter.)

7 MR. FREITAS: it's about the process.

8 HEARING OFFICER WILLIAMS: Would it be
9 more appropriate for a public comment?

10 MR. FREITAS: Okay, sure, let's make it
11 a public comment.

12 HEARING OFFICER WILLIAMS: Can you --

13 MR. FREITAS: Hold it?

14 HEARING OFFICER WILLIAMS: -- hold it
15 until you've questioned the witness?

16 MR. FREITAS: Okay. I'll hold it.

17 CROSS-EXAMINATION

18 BY MR. FREITAS:

19 Q Are you familiar with Toby Hopper?

20 A Yes, I've worked with Toby Hopper.

21 Q Have you? And the Applied Energy
22 Systems Group?

23 A Yes.

24 Q Are you familiar with the Paramount
25 credit exchange between Toby Hopper and Paramount

1 Farms?

2 MR. HARRIS: This isn't my witness but
3 I'm feeling I don't understand the relevance, and
4 so -- can we go off the record for just a second?

5 HEARING OFFICER WILLIAMS: Okay, off the
6 record.

7 (Off the record.)

8 MR. WARNER: Dave Warner.

9 BY MR. FREITAS:

10 Q Dave, Mr. Warner, is there -- are there
11 any unclaimed emission credits that are floating
12 out there that were either withdrawn from the bank
13 or that were not reported, or remain unreported?

14 A I'm not sure I understand the question.
15 There are reductions in emissions that occur that
16 don't get banked. Is that the question?

17 Q Could people be sitting on certificates
18 that are not part of the San Joaquin Air Pollution
19 Control Board bank?

20 A No, the method of generating emission
21 reduction credits is through the Air District.

22 Q So just in that process alone it gets
23 recorded?

24 A That's correct.

25 Q And that's why you have a tracking

1 system that's par none?

2 A Well, the tracking system is related,
3 yes.

4 Q Okay. Now you made a statement earlier
5 that ERCs are an accounting process and they have
6 no effect on air quality. Could you elaborate on
7 that statement?

8 A Certainly. It's a slight
9 mischaracterization --

10 Q Before you continue, let me get the Bee
11 on the line, I just want to make sure --

12 (Laughter.)

13 ASSOCIATE MEMBER GEESMAN: They don't
14 work that late, Keith.

15 (Laughter.)

16 MR. WARNER: That's not really quite
17 what I said. I said that these credits that are
18 at issue with the CEC Staff, and specifically I
19 was talking about the pre-1990 credits, the use of
20 those credits versus some that were generated
21 after 1990 doesn't mean anything to how much our
22 air quality improves or doesn't improve. That's
23 not the issue here.

24 The issue is only how do we account,
25 because those pre-1990 credits are before, they

1 predate this plan, it's only a question of how we
2 account for those pre-1990 credits.

3 And EPA and the District are in complete
4 agreement on that. It's a matter of how do
5 account for them. The disagreement is in the
6 mechanics of that.

7 BY MR. FREITAS:

8 Q But that's only dealing with pre-90 and
9 '93 -- post '93 or pre '93 --

10 A It's been clarified that it's only one
11 date that we need to worry about, it's pre-1990.
12 The 1993 is, I believe the CEC has abandoned that
13 as a relevant date.

14 Q Because I heard in earlier testimony I
15 think I heard that '93 was now pushed into '90?

16 A Correct.

17 Q When you referred to the promise to
18 withdraw, and I'm not sure if I followed it
19 correctly, account for the pre-1990 credits, you
20 stated that the rate of progress plan is handled
21 by the scheduling department?

22 A No, the planning department. We have a
23 group that's responsibility is to put together
24 those plans on how we will achieve clean air.

25 Q You don't have any authority over that

1 planning department?

2 A No, I do not.

3 Q Do you --

4 A My department does interact with the
5 planning department, of course. We're, you know,
6 under the same roof. And we provide the input
7 into the plan on the issue of -- on any permitting
8 issues, including this pre-1990 issue.

9 Q Could we get an answer to that question?

10 A What question?

11 Q I believe the rate of progress, why the
12 rate of progress was at its rate, at the rate it
13 was.

14 A Oh, --

15 Q Is there, you know, Mr. Kramer, I think
16 he had a question and then you said no, I can't
17 answer that question because the plan is handled
18 by the planning department, or the scheduling is
19 handled by the planning department.

20 Is there any way we could get an answer
21 to that question?

22 A Certainly. I don't know what the
23 mechanism would be for -- would be in this
24 environment, but there certainly could be an
25 answer to that question.

1 MR. FREITAS: Maybe you could help, Mr.
2 Williams, with ow a guy could go about getting an
3 answer to that question?

4 ASSOCIATE MEMBER GEESMAN: I don't know
5 that it's relevant to our proceeding here.

6 HEARING OFFICER WILLIAMS: Yeah, I
7 mean --

8 ASSOCIATE MEMBER GEESMAN: -- suggest
9 you may want to just inquire directly to the
10 planning department at the District.

11 MR. FREITAS: Okay. That's an answer.

12 BY MR. FREITAS:

13 Q You characterized your rules as being
14 much more stringent than EPA. Yet later on in the
15 testimony it came out that the EPA actually had
16 put you in a position where you could volunteer to
17 be termed a -- I want to make sure I get that
18 statement right -- as an extreme area.

19 I think you stated that you have an
20 opportunity to volunteer. Why would, if your
21 rules are more stringent than the EPA, why would
22 it ever come up that you could volunteer to become
23 an extreme area, or designated an extreme area?

24 A I really don't follow you. There's no
25 connection between those two areas. My statement

1 was that in many respects our new source review
2 rule, which is the rule that governs, most
3 specifically governs how we issue permits for new
4 sources, is, in many areas, much more strict than
5 federal regulations, federal new source review
6 regulations.

7 Q So there's no relationship between your
8 rules, the stringent rules that you have in
9 comparison -- or that's not related to the
10 designation of being an extreme --

11 A Yes.

12 Q -- area? Is that correct?

13 A That's correct. It's really not related
14 to --

15 Q No relationship?

16 A -- to the possibility that we might
17 choose to be declared an extreme area.

18 Q Could you give just summarize real quick
19 your own interpretation of why you would be
20 determined to be an extreme area?

21 A Why we might voluntarily choose to --

22 Q Or why you may involuntarily be?

23 A Well, that's not really on the table at
24 this point. But the fact is that there are many
25 issues conspiring against the District achieving

1 clean air in the next five years or so. And so we
2 don't believe that we will be able to meet the
3 mandated timeframes as a severe area to get to
4 clean air.

5 The extreme designation would do a
6 couple of things. It would increase the length of
7 time that we have to legally comply with the
8 attainment process. It would allow one of the
9 biggest problems in the Valley to be addressed.
10 As you may know, we have well over 50 percent of
11 our air pollution problem is from mobile sources.

12 It may not be common knowledge, the Air
13 District has no regulatory authority over those
14 sources. The federal EPA does. And they have
15 stalled and stalled again their regulatory
16 responsibilities to control emissions from mobile
17 sources.

18 They now have some plans to implement
19 some regulations in 2007 and 2008, 2009. Without
20 those being implemented by the federal government
21 that will regulate largely trucks and other heavy
22 duty equipment, we won't be able to achieve clean
23 air in the San Joaquin Valley.

24 Going to extreme will give us time for
25 EPA to actually implement those if they were to

1 stick to this newest schedule.

2 Q And under that it would be the diesel
3 the main culprit?

4 A That would be finally addressed, yeah.

5 Q Yeah.

6 A Not necessarily the main and only, but
7 it's a significant one.

8 Q Have you initiated a scrubber program?

9 A I'm not sure what that means.

10 Q Diesel engine scrubber program. Where
11 you put scrubbers on the exhaust.

12 A We don't have a program that's limited
13 in that way, no.

14 Q Do you have it as an incentive program?

15 A Well, we implement the Moyer program
16 that was discussed earlier. And I'm not sure
17 that's ever been used to put diesel exhaust
18 cleaning devices, if that's what you're talking
19 about as a scrubber. Usually it's replacement of
20 engines with cleaner engines.

21 Q But in older engines are you familiar
22 with a scrubber program?

23 A No, I --

24 Q Do you know that there's not one out
25 there?

1 A -- don't know what that means.

2 Q It's basically like a catalytic
3 converter for a diesel.

4 A Those are commercially available, yes.

5 Q They are, okay. Is that part of the
6 incentive program, or is it -- it's not a
7 mandatory requirement, is it?

8 A No, it's not a mandatory requirement.

9 Q And that would be by the EPA -- if it
10 was made mandatory, it would have to be by the
11 EPA, right?

12 A Depends on the application. For mobile
13 sources and nonroad engines, yes, it would be in
14 EPA's hands. For stationary sources it's in the
15 District's hands. And we do require those on some
16 stationary sources.

17 Q Like ag wells, for example?

18 A So far ag wells are permit-exempt.

19 Q One last question. Maybe two. After
20 the preliminary -- could you explain double
21 accounting, what that was reference to? Mr.
22 Kramer asked you, made a statement about double
23 accounting.

24 A Sure. He was referencing one emission
25 reduction credit certificate that was a part of

1 applicant's Pastoria project submittal. And then
2 was also submitted as part of the San Joaquin
3 Valley Energy Center project.

4 Q Earlier I asked Mr. -- oh, boy, --

5 ASSOCIATE MEMBER GEESMAN: Rubenstein.

6 BY MR. FREITAS:

7 Q -- Mr. Rubenstein a question about if
8 credits could be used for -- the same credit could
9 be used for two applications, or two different --
10 would that be what we were talking about? Or
11 would that be a different issue?

12 A I'm not sure I understand that. If
13 you're asking would we allow that. No, absolutely
14 not. We will not allow the use of a single credit
15 to offset two different sources of emissions.

16 Q Are you aware of any attempt by the
17 applicant to do that?

18 A I just stated we did receive the same
19 credit as a proposal to offset emissions for both
20 of those projects, and that has since been
21 remedied.

22 Q How was that caught, discovered?

23 A CEC Staff discovered it.

24 Q Would it have passed through the system
25 if the staff hadn't discovered it?

1 A No, it would not. As --

2 Q You have a checks and balances in your
3 system that would have caught it eventually?

4 A Yes. At the time that the certificates
5 were actually surrendered to the District it would
6 have been discovered.

7 Q This is my last question. You said that
8 there was a lack of fairness, that was your term,
9 in the being told that the credits were no longer
10 valuable.

11 A That's correct.

12 Q Could you just emphasize on that a
13 little bit?

14 A Sure. I mentioned the four or five
15 other major power plants that have been permitted
16 in the San Joaquin Valley over the last couple of
17 years. Each of those used pre-1990 credits, every
18 one of them.

19 And yet this is -- before I came here
20 today and heard EPA's point of view, I was very
21 concerned that EPA was objecting to that use in
22 this case.

23 And the reason for that is that the
24 taking of credits from a source that has purchased
25 them in good faith is something that our rules

1 give a very -- a prescribed method for, we can't
2 take them without going through a public process.

3 But that, in effect, was what was going
4 on. And yet it wasn't proposed for the other
5 major power plants that had the same type of
6 proposals.

7 Q So in your statement it wasn't fair, you
8 were actually -- that was in the context of this
9 application and for this applicant and for their
10 credits?

11 A That's correct.

12 Q It was referring to their credits in
13 this. So it's your opinion that these credits
14 were bought fairly and in good faith, and they're
15 worth the value --

16 A That's correct.

17 Q -- that they're being applied for?

18 A That's correct.

19 MR. FREITAS: That's all I have.

20 HEARING OFFICER WILLIAMS: Thank you
21 very much. Applicant, do you have any questions?

22 MR. HARRIS: No, thank you.

23 HEARING OFFICER WILLIAMS: Well, thank
24 you, Mr. Warner. I want to be just as effusive in
25 praise of you as I was for Mr. Greenberg. And

1 applicant's visual expert. We really appreciate
2 your taking the time and hanging in there with us.
3 Thanks, again.

4 MR. WARNER: You bet.

5 ASSOCIATE MEMBER GEESMAN: Yes, thank
6 you very much.

7 HEARING OFFICER WILLIAMS: We appreciate
8 it.

9 MR. WARNER: I can't wait till the next
10 time.

11 (Laughter.)

12 MR. FREITAS: That's about seven hours,
13 eight hours away.

14 HEARING OFFICER WILLIAMS: So I think at
15 this point all the exhibits are in, I take it?

16 MR. HARRIS: I think they are in, but if
17 staff is willing to -- I'm willing to suggest that
18 they all should be in if staff is willing to do
19 that. In case somebody -- I don't think I forgot;
20 I don't think you forgot any. But they should all
21 be in.

22 HEARING OFFICER WILLIAMS: Yeah.

23 MR. KRAMER: Right. I don't know if we
24 formally introduced public health, but we
25 certainly meant to.

1 HEARING OFFICER WILLIAMS: Well, we'll
2 stipulate that they're all in.

3 MR. HARRIS: Yes.

4 HEARING OFFICER WILLIAMS: And with
5 that, we'll close until tomorrow at 1:00.

6 MR. HARRIS: We're closed on air, then,
7 is that correct?

8 HEARING OFFICER WILLIAMS: Closed on
9 air.

10 MR. HARRIS: Thank you.

11 (Whereupon, at 10:00 p.m., the hearing
12 was adjourned, to reconvene at 1:00
13 p.m., Thursday, February 20, 2003, at
14 Sacramento, California.)

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CERTIFICATE OF REPORTER

I, VALORIE PHILLIPS, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Hearing; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing, nor in any way interested in outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 24th day of February, 2003.

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